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Medical Lib

JOURNAL
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Volume 5 JANUARY, 1930 Number 1

Address of President*

BURTON D. MYERS
Indiana University School of Medicine, Bloomington, Indiana

Forty years ago last June, as a high school graduate, I read and quoted from Winchell's "Sketches of Creation," published in 1870. In a rather florid style, Winchell wrote: "Whence came we and whither are we tending? Whence this prodigious globe which we inhabit? What vicissitudes has it undergone? What is its final destination? And when the drama of the earth has closed, what then?"

These are, of course, great problems with which at some time or other most civilized people make contact and many have believed the "Whence came we" of Winchell's inquiry very definitely answered and the time closely fixed at about 6000 years ago.

Later, I found that Omar Khaiyam, in the Rubaiyat, many years earlier, had thought along the same line as Winchell and had written:

"Into this Universe and why, not knowing,
Nor whence, like water, willy-nilly flowing,
And out of it like wind along the waste
We know not whither—willy-nilly blowing."

The Garden of Eden account found in 2nd Genesis is not only an evidence of interest in this question, but an answer found acceptable for many centuries. Many scholars, however, consider the Mosaic account traditional, legendary, the product of the thought of a much earlier period. Indeed, we may safely assume interest in "whence came we" is of vast antiquity.

Today, evolution furnishes an answer to the "whence" part of this thought and anthropologists have carried the six thousand year date back to a time seven to twenty thousand years ago for the Cro-Magnon people, fifty thousand years ago for the Nieanderthal people, back through the Heidelburg Man and others to Pithecanthropus erectus, approximately 500,000 years ago, or more.

Moreover, archeologists have dug up ancient cities and have found beneath them the remains of still earlier cities and civilizations. Even here on this continent in Central America we find marvelous Chichen Itza, and evidence of a civilization amazingly advanced in Architecture, Astronomy and Mathematics, and we get comparatively little thrill

*Delivered at the Fortieth Annual Meeting of the Association held in New York City, November 7, 8 and 9, 1929.

when Lindberg, in a few hours flight, locates a few other ancient Maya cities.

Today, we know very definitely that civilizations have developed and then have sunk into oblivion, and only fragments of skulls or drawings on cave walls remain to stimulate speculation as to what the people were like and what they did, and we can only guess as to why they disappeared.

Following the methods and measurements established by Professor His. of Leipzig, in his remarkable construction of the bust of Bach, with only the Bach skull as a guide, scientists have attempted the reconstruction of the Nieanderthal man, the Cro-Magnon, and the Swiss Lake Dwellers. We know the Cro-Magnon people were physically superior to their successors. They were men of great stature, probably constituting a background of fact for the stories of giants. Their skulls show a brain capacity larger than the average of today. Yet they disappeared, and it is possible that the invention of the bow and arrow was sufficient to end their thirteen thousand year strut across the stage.

While evolution provides an answer to the "Whence came we" of Winchell, Omar Khaiyam, Moses and others, the "Whither are we tending" is a very live question today, and during the past few years we have had Beard's book, "Whither Mankind," Page's "Recent Gains in Civilization," and Ross's "Standing Room Only," to mention only a few of the absorbingly interesting publications on this subject. Evidence of the wide spread interest in the subject is found in the fact that during the month of August, "Whither Mankind" ranked eighth among the books, not novels, most frequently called for in libraries.

We know more today of the long history of our race than ever before, and thoughtful men are studying it carefully to detect, if possible, the key to the trend of our own civilization and determine if "All's right in the world," or if in the enjoyment of the greatest per-capita wealth the race has ever known and the undoubted progress in the sciences, which, as Hu Shi, the Chinese philosopher, expresses it, is liberating man from slavery and affording time for pleasure and recreation, while reducing death rate and increasing longevity; thoughtful men, as I have said, are striving to determine if in the presence of all these and many other blessings, there are forces operating quietly but certainly, which in a few hundred years will write finis to our civilization, as we know it today. They are endeavoring to crack open the sealed story of past declines in civilization in the hope that we may win the answer to our inquiry as to whether the curve of our civilzation will continue to sweep upward to glorious undreamed-of heights, or if it has already reached its zenith, and has begun a downward sweep to some far nadir without any past experience which we may call upon to check it.

That such a decline has begun is the view of Oswald Spengler, whose "Untergang des Abendlandes" appeared in July, 1918, though the author tells us the work was conceived prior to 1914 and fully worked out by 1917.

Ferrero, author of the "Greatness and Decline of Rome," in his book, "Ancient Rome and Modern America," drawing a parallelism between the culture of the Roman Empire at the peak of its grandeur and display and the culture of Europe and America today (his book was published in 1914), reaches the same conclusion as Spengler.

Our U. S. Bureau of Statistics believes the peak of percapita income in America is past.

In this great problem "Whither are we tending?" we medical men should be much interested, for we have contributed enormously to the unbalancing of our population. Intent on the saving of life and prolonging it, we have worked, oblivious of the fact that what for the individual is of supreme importance and supremely desirable, may be for the race a menace. We have looked with pride upon statistics showing increased average life rate; we are aware that the increase in average life rate is due largely to reduction of infant mortality and that the expectancy of the man of fifty has not greatly changed. But we have reports of campaigns planned and definitely directed against those diseases of mature life, which, if successfully carried out, will materially increase the expectancy of those of mature years. We have looked upon our work and called it good. We have seen the lives of thousands of the bread-winners of families saved and prolonged; we have seen their families continue to enjoy the blessing of their support; we have seen their children go to college and make long preparation for a useful career. We have seen these bread-winners lay up a reserve for their own old age. In many cases we have seen that reserve become a surplus, in some instances an enormous surplus, from which various charitable and philanthropic enterprises are financed. Back of the millions devoted, in recent years, to medical education, one of the factors making it possible is the surgeon or internist who has saved and prolonged the lives of the men who have accumulated the surplus.

But is our work all for the advantage of our present day civilization?

Ross, of Wisconsin, in his most interesting book entitled, "Standing Room Only," visualizes a time when, if population continues to increase as determined (1) by our present birth rate and (2) by our present amazingly decreased infant mortality and (3) with prospect of increased expectancy for the man of fifty, we will have a population so great that it will be necessary to hang out the sign "Standing Room Only."

The U. S. Census Bureau calculates that the 4,400,000 whites in the U. S. in 1800, had expanded to 37,290,000 by 1900—an eightfold

increase in a century, a doubling about every thirty-three years. The population of the world at its present rate doubles every sixty years. Suppose we assume that the population of the U. S. instead of doubling every thirty-three years, will double every sixty years, as does the world's population. Assuming our present population to be 120,000,000, then in three successive sixty year periods, we would have 240,000,000; 480,000,000; 960,000,000; and in two hundred and forty years, 1,920,000,000, a figure materially in excess of the present population of the earth. That is, in about half the time which has elapsed since Columbus discovered America, Ross's "Standing Room Only" might be a reality.

In its last analysis the economic lot of a people depends upon the relation of population to food supply. Not even the most optimistic believe our food production can be doubled four times, increased sixteen fold.

To realize what effect such an increase in population would have on our present day civilization, we must go to some country like China where forests, parks and every available foot of land must be used to raise beans, or rice.

In war days, our bread grew darker and darker. In the presence of so great a population increase, our bread would again grow darker, our diet more and ever more meager, surpluses of all character would shrink, the buffer between comfort and want would become less and less, provision for all philanthropies, and for education, would decrease almost to the vanishing point, and for the great majority of the population, the major concern would be for the next meal.

This is an ugly picture, but a picture for which we medical men are in no small degree responsible. Population growth depends upon the ratio of birth rate to death rate, and though here in the U. S. the birth rate has fallen, we have so amazingly reduced the death rate that during the last sixteen years in the registration area of the U. S., there were 41,000,000 births to 22,000,000 deaths, approximately two births to one death.

Statistics show that the English speaking whites of the world have increased nearly eighteen fold since 1800. They are now more than one-fourth of all the population of European descent, whereas, in 1800, they were less than one-eighth. Moreover, non-whites have increased enormously under rule of whites. During forty years of British rule in Egypt, 1882-1922, the population has doubled. India, under British rule, in forty years has increased her population by fifty million. The Philippines, under American occupation, have added five million to their population. Java, about the size of the State of New York, under Dutch administration, is peopled by thirty-seven million, nine times as many as in 1800. Each rural person in Java has 3/5ths acre of cultivated land as against 31 acres in Iowa. Porto Rico has become a

veritable hot bed for picaninnies, and now, next to Java, is the most densely populated agricultural region in the world.

Since early colonial days famine has not been known among whites in America. Except for three famines in Russia in the thirty years from 1891 to 1921, and except for the famine in Ireland in 1846, famine has been absent from the European Continent since 1125, when Germany lost half her population from hunger.

Have we made our conquest of disease and throttled pestilence only to introduce a condition which must become progressively bad until famine again stalks through the land, supplanting disease as a grim reaper, or until population pressure becomes so great as to lead to seizure of territory for an expanding population and become the cause of a new war which will get rid of gun fodder?

Throughout the ages there has been, until recent times, a relatively close balance between birth rate and death rate. War, pestilence and famine have contributed to the maintenance of that balance. We may abolish war, throttle pestilence, and for a time, we may muzzle famine; but if the present rate of population increase maintains long enough, it seems an inescapable conclusion that famine will again be a world-wide menace.

The solution of this problem seems evident, but I am not prepared to say just how the solution should be brought about. Certainly, it is not solely the province of the Doctor of Medicine to consider the solution, though we are becoming accustomed to the ever-growing social aspects of a doctor's practice.

The work of the doctor is the saving of life and the protection of the health of the people. His contact is usually a man to man contact. This is particularly true of the surgeon. He does not deal with groups of people, but operates on individual man or woman. The internist has this contact with the individual, but he easily makes a group or community contact, as when a student population is tested to determine susceptibles in a threatened diphtheria epidemic, and the susceptibles, when located, are immunized. Individual will and prejudice is then subordinated to the public good. The cultist who disagrees must conform or withdraw. Then the Doctor of Medicine becomes a Sociologist, a Doctor of Society and with the collaboration of converts to his views, legislation is enacted which calls for vaccination, water supplies free from typhoid bacilli, mosquito eradication, etc., affecting entire states with millions of individuals, or entire divisions of a continent.

Now just as Doctors of Medicine are continually on the alert to protect the individual and society from injury in the shape of disease, so we have our Doctors of Sociology, specialists in social welfare, diagnosticians of diseases of society, of our present day civilization. They must be able to detect conditions menacing to our civilization and by a

radical operation, by isolation or quarantine free society of that menace.

But the problem is not alone for the conjoined attack of the Doctors of Medicine and the Sociologists. The major diseases threatening our social order today are related to crooked thinking. Our psychiatrists and psychologists know that what men think can incapacitate them as certainly as hookworm or malaria. They also know there is a kind of contagion in which crooked thinking grips a community. "A place in the sun"—"Drang nach Osten" are a few of the catch phrases which only a few years ago precipitated a great cataclysm.

If the field of the psychologist and psychiatrist were broadened as much as the field of activity of the internist, the psychiatrist might properly assume leadership in all fields of crooked thinking that might lead to serious consequence for our state or nation.

Time may be a function of straight thinking. Changing conditions may render what had been a social advantage a social disadvantage. What had been straight thinking thus becomes crooked, and established views must be junked. As illustration:

On the base of the Statue of Liberty in the harbor of this great city, we find engraved, "Send us your huddled masses yearning to be free," —but do we really want them? Are not our gates—formerly open wide, now closing? They are closing against the defectives and undesirables of all countries. They are closing against the entire population of certain countries, not because of race inferiority, for they are not inferior races, but because their philosophy of life and religion, the things they think and believe, are insurmountable bars to their assimilation.

Dedicated in 1886, it has taken more than forty years to change our attitude toward immigration, which after all is a rather quick reaction, a rather short time in which to acquire a sufficiently general understanding of the facts involved, to make such a change in attitude possible.

Another illustration of crooked thinking which must be corrected is the following:

It has been stated that a little over a century ago, England had more than a hundred capital offences, more than 100 offences for which a man's life might be taken. That was England's answer, but a brief time ago, to the problems created by the non-social elements of her population. This, of course, was cruel, but from a social point of view our present attitude which conserves the lives of non-social elements of society permitting them to propagate their kind, is infinitely more culpable.

Ross, Pearl, and others give figures to show there are certain groups in our population which do not reproduce themselves in replacement numbers. There are other groups, including most of the professions, among which births are just about sufficiently numerous to maintain their numbers.

There are other groups, however, within which the birth rate is sufficiently high to provide an annual increase in population. This increase is greatest among those whose earning capacity is least and whose ability to care properly for the rearing of children is least.

Finally, there are the mental defectives, charges on the community, whose numerous off-spring will continue to be charges on the community.

Certainly this last group offers a minor point of attack on this problem of growing population in which medical men may exert leadership in securing sterilization legislation, such as that already in force in California.

Kipling wrotes the lines:

"And each for the joy of working
And each in his separate star
Shall paint the thing as he sees it
For the God of *things as they are.*

In the midst of things as they seem to be, there is a *reality of things* bearing on the trend of our civilization.

The detection of this reality of things is the job not alone of Doctors of Medicine, Sociologists, and Psychiatrists, but of a great group of specialists. Working independently, the facts, if recognized at all, may be ascertained too late to be of any use. Working as a cooperating group, Doctors of Medicine, Sociologists, Psychiatrists, Psychologists, Economists, Paleontologists, etc., there is hope we may detect trends in our civilization with their causes in time to escape catastrophe.

Expeditions no longer go into the Gobi desert single-handed but as cooperating specialists.

We have our great foundations for the study of cancer, health problems, etc., etc. Why not great foundations and coordinated effort in the diagnosing of a sick civilization? Why not a coordination and cooperation of established departments within our Universities, for the study of what is probably the most important question before any people, that of "Whither are we tending?"

Is the proposal more visionary than the plea for aseptic surgery sixty-five years ago when nearly everyone believed in spontaneous generation?

Examples of such cooperation of departments, brief in duration and directed toward the solution of problems of local interest, can no doubt be cited in many Universities. Such cooperation was found at Indiana University a few years ago when a number of departments collaborated in the study of a defective family.

Yale's Human Welfare Group (funds for the Institute of Human Relations building have just been announced), the purpose of which, as stated in *Science,* is to correlate scientific knowledge in the study of man as a whole, from the mental and social as well as the physical point

of view, is, I believe, the first major coordinated effort of this sort.

As leaders in the field of medical education, we cannot escape responsibility for urging that this most important matter receive emphasis.

The conservation for future generations of those elements of our civilization of greatest social value, may depend upon our doing so.

* * * * *

May I add that I am not alarmed, and I am not pessimistic. I view the seemingly logical conclusions based on the facts reviewed above with a certain degree of incredulity. I share the general inclination to stick my head in the sand and refuse to see danger in shifting human relations, and growing population pressure.

I do not believe our race is going to be exterminated, nor has the Maya race been exterminated; but, whereas, the ancient Mayas were great mathematicians, the remnant of that race barely counts to ten, and the things which made their life worthwhile are gone. The Maya culture and civilization are dead. Persisting as the discard of a great civilization, as Spengler expresses it, offers little of advantage over race extermination.

There are many who believe that hunger drove men from the hunt to agriculture and has thus been one of the most important urges in the development of the race. It is possible that famine must again drive us forward to a new level of civilization. I believe, however, that the time will come when people will be wise enough to take into account the past experiences of the human race to such a degree that they will make adjustments necessary to the preservation and advancement of our civilization *voluntarily*, rather than under the threat of famine.

It is with the hope that we, of our present civilization, may be able to do this, that I have advocated the coordination of all those departments of information and study which bear upon human relations, focusing their findings on the diagnosis of the problem of "Whither are we tending" in essentially the same way that the specialists of a great clinic collaborate in the diagnosis of a difficult clinical case.

Academic Achievements of Multiple Applicants*

ADAM M. MILLER
Dean, The Long Island College Hospital

After the experience of compiling the statistics which are about to be presented we are constrained to express to Dr. Myers our sympathetic appreciation of his achievement in handling the cards that are sent to him by the various medical schools every autumn. We are also indebted to him for certain data which have made our study possible.

With the increasing number of applicants for admission to medical schools each year and the concomitant increase in the number of rejections, it seemed desirable to make a study of the academic records of the students who were admitted under the conditions of keen competition that has been growing from year to year. It has been pointed out at the last three meetings of this Association that each year more prospective medical students are seeking admission; and not only is a greater number seeking admission but individuals are filing an increasing number of applications. Dr. Myers stated in his report in 1928, at Indianapolis, "The increase in number of applications is four and one-half times as great as the increase in the number of applicants."

Selection of Matriculants

If an applicant is admitted to a given school it is possible that he had applied for admission to and had been either accepted or rejected by one or more other schools. Rejection or acceptance is based on some factor or factors in the methods employed by medical schools in selecting their students. Methods or selection vary. An applicant may, by his college record and through personal interview or some other means of finding out something about him, be regarded by one school as an acceptable person, by another school as not acceptable. At the time he is accepted the real capabilities of this person are yet to be proved in the medical school. After they have been proved or disproved, who, in accepting or rejecting him, had made the wiser choice?

It is now possible through the card system in use by the membership of this Association to ascertain for any given school how many applicants accepted by it had been also accepted or rejected by other schools and the reason for rejection. With this information at hand, we have made a thorough study of the records of the students who were admitted to Long Island in 1926, 1927, and 1928.

In Table I are shown academic averages, in terms of percentage, of the three classes in question for the various years and for certain groups into which each class falls with respect to the number of rejec-

*Read at the Fortieth Annual Meeting of the Association held in New York, Nov. 7-9, 1929.

tions by other schools. The apparently arbitrary grouping, as indicated in the first vertical column, has a certain element of logical arrangement. The students who had not been rejected are indicated by zero (0). Those who were rejected by one, two, three, or four other schools are indicated by 1-4. This number was chosen because there are four other schools in the City of New York to one or more of which students might be expected to apply. Students who were rejected from five to ten times are indicated by 5-10. With competition so keen in Greater New York (all the metropolitan schools having many times more applicants than can be accommodated), a certain number may submit applications to several of the eastern schools. Students

TABLE I. ACADEMIC AVERAGES OF THE THREE CLASSES.

1926 Rejects		1st Yr.	2nd Yr.	3rd Yr.	Gr'p Av.
0	46	78.8	80.2	80.7	79.9
1—4	43	78.9	81.6	80.9	80.5
5—10	13	77.1	80.8	80.4	80.4
11 plus	2	82.2	81.2	82.5	81.9
Class Average	104	78.7	80.8	80.8	80.1
1927					
0	36	81.2	80		80.6
1—4	54	79.5	79.5		79.5
5—10	18	78	78.3		78.2
11 plus	1	80.6	81.4		81
Class Average	109	79.8	79.5		79.7
1928					
0	20	81			81
1—4	54	80.3			80.3
5—10	27	79.8			79.8
11 plus	9	81.3			81.3
Class Average	110	80.4			80.4

who were rejected more than ten times are indicated by 11 plus. Some are so desirous of studying medicine that they will apply at a large number of schools on the chance that they may be admitted somewhere.

The second vertical column shows the number of students in each group upon which the percentages in the other vertical columns are based. Group averages are readily compared. Class averages are also shown for comparison with group averages. It should be noted that the number of students in each group is not the exact number admitted but the number after withdrawals prior to any definite record of work. The exact number admitted in each group is shown in the second vertical column in Table II.

Comparison of group records fails to bring out any striking differences in academic achievements among the various groups in the various

years. It can be said that the group with from 5 to 10 rejections to their credit (or discredit) has the lowest or next to the lowest averages, with one exception (1926, 2nd year). It can also be said that the group with 11 or more rejections has the highest averages, with one exception (1927, 1st year). Too much emphasis should not be placed on the latter statement because the group is small.

Table II is perhaps more interesting. It is designed to show what has happened in the upper and lower registers of the various classes (those admitted in 1926, 1927, and 1928). The same grouping with respect to the number of rejections is shown in the vertical column on the left. The second vertical column indicates the exact number accepted in each group at the beginning of each of the years in question. (Comparison with the second vertical column in Table I will give the

TABLE II. ACADEMIC FATE OF THREE CLASSES.

1926	1st Year				2nd Year				3rd Year			
REJECTS	FO	FR	C's	H's	FO	FR	C's	H's	FO	FR	C's	H's
0	51	14	2 3:4	8	0	0	1:2	6	0	4	2:3	12
1—4	48	15	2 1:1	10	2	0	1:3	13	2	2	8:9	6
5—10	14	21	7 3:2	7	0	7	8:9	7	0	0	8:9	7
11 plus	2	0	0 0	0	0	0	2:1	0	0	0	0	0
1927												
0	37	3	0 1:3	14	3	9	3:4	8				
1—4	57	4	2 2:3	7	0	4	4:5	9				
5—10	18	6	0 1:2	6	16	11	7:6	11				
11 plus	2	0	0 0	0	0	0	0	0				
1928												
0	21	5	10 3:5	0								
1—4	57	9	4 5:6	16								
5—10	30	3	3 8:9	3								
11 plus	9	0	0 2:3	0								

FO—% Failed out. C's—Conditions
FR—% Failed. May repeat. H's—% Honors.

number in each group that withdrew before making a definite record). Under each year, as shown at the top of the table, are four vertical columns, the figures in each, except the third, being in terms of percentage based on the number admitted in the corresponding group. FO means "failed out and dropped"; FR means "failed the year but may repeat"; C's means "conditions" (for example, 3:4 means 3 conditions to 4 students, or three-fourths of a conditions per student); H's means "honor students" (the highest 10 per cent of the class). Let it be stated again that the figures in the columns just referred to, except "conditions," are in terms of percentage based on the number admitted in the corresponding group. For example, 10 in the H's column means that 10 per cent of that group are "honor students."

Comparison between the 0 rejection group and the 1-4 rejection group yields no striking contrasts. Similar lack of striking differences

are observed in the academic averages. In the classes that were admitted in 1926 and 1927, the 5-10 rejection groups show the highest mortality and the greatest number of conditions per student, but a consistent percentage of honor students. On the other hand, in the class admitted in 1928 the 5-10 rejection group shows the lowest mortality and also a low percentage of honor students (only, of course, a one-year record).

When statistics had been compiled setting forth the academic achievements of students who had been rejected by from one to twenty other schools, it seemed natural to extend our studies to the records of those who had been accepted by other schools. Table III exhibits the result. It is the most encouraging of the three.

TABLE III. SUMMARY OF ACHIEVEMENT.

	Acc's	0	1—4	5—10	11 Plus
10 in 1926	10	1	7	2	0
11 in 1927	13	2	5	3	1
29 in 1928	37	5	14	7	3

	No.	FO	C's	H's	AV	CL AV
1926	10	40%	2:1	0%	75%	78.7%
1927	11	10	1:1	10	78.2	79.8
1928	29	3	1:2	14	81:2	80.4

In the upper part of Table III, in the vertical column at the left, is the number of students who had been accepted at one or more other schools; the second vertical column shows the number of acceptances. To the right each group is subdivided in accordance with the number of rejections (grouping as in Tables I and II). In the lower part of the table are shown from left to right, in the vertical columns, the number of students, the percentage of failures (FO—failed out and dropped), the ratio of conditions to a student (C's), the percentage of honor students (H's), the academic average of the group, and the academic average of the entire class. There is one consistent and outstanding feature in this table; that is, the improvement in all respects from year to year. If we may be allowed to venture on an interpretation it would be this: Either the students applying from year to year are improving or deans and admissions committee are growing in wisdom and acumen.

Conclusions

Definite conclusions from this study do not seem to be warranted, but there are certain indications which are worthy of note. The group of students who had been rejected more than ten times had the highest or next to the highest academic average. The group that had been rejected from five to ten times had the lowest or next to the lowest academic average. The group that had no rejections and the group with from one to four rejections had averages which differed but slightly and which were not distinctly in favor of either group.

The Scholastic Achievements of Multiple Applicants*

ALEXANDER S. BEGG
Dean, Boston University School of Medicine

Various commissions and committees have interested themselves in medical education in the past and much good has resulted from their investigations. It is apparent, however, that more and more will be expected from the schools themselves independently and through the medium of their voluntary Association. The study made by Dean Myers during the past few years is an example of a co-operative effort made possible only because of the interest of the member schools. The figures need further study and analysis, and the various leads suggested must be followed up by further investigation.

This study has shown, among other things, that the number of applicants is in excess of the number of vacancies, and that on the average each applicant is making an increasing number of applications. It has been suggested that the number of applications is in proportion to the desirability of the student, and that possibly the acceptance by any medical school of a considerable number of such "multiple applicants" might be indicative of lower standards. Therefore, at the suggestion of Secretary Zapffe, a study of this problem has been undertaken independently by the three institutions reporting today.

In presenting the figures from Boston University I have arranged to show (Table 1) the increase in the number of applications handled and the numbers accepted.

TABLE 1

APPLICATIONS AND REGISTRATIONS

	Number Applications Considered	Number Applicants Accepted	Number Matriculating	Number Withdrawing Before Examination	Number Receiving Ratings
1926-27	383	90	60	6	54
1927-28	588	104	61	8	53
1928-29	737	112	68	6	62
Totals	1,708	306	189	20	169

It will be noted that there is a considerable excess of acceptances over actual enrollments and while some of those who did not report withdrew for various reasons, there were a number each year who enrolled in other institutions without taking the trouble to advise us. Dr. Myers has shown this duplication of acceptances to be a very considerable item in the figures of the Association as a whole.

In Table 2 we present the figures which show in groups the num-

*Read at the Fortieth Annual Meeting of the Association held in New York, Nov. 7-9, 1929.

bers of applications made by the students and the ratings received in the first year's work.

TABLE 2

BOSTON UNIVERSITY MATRICULANTS 1926-1929
According to Number of Applications Made and Averages for First Year's Work

Number Applications Made	Number Making Applications	Ratings A (87-92)	B (80-86)	C (70-79)	Failure (Below 70)
1	62	4	21	28	9
2	35	3	8	18	6
3	33	1	8	16	8
4	11	2	2	5	2
5	10	2	3	5	0
6	5	2	0	3	0
7	4	1	2	1	0
8	4	0	0	3	1
9	3	1	0	2	0
11	1	0	1	0	0
13	1	0	0	1	0
Totals	169	16	45	82	26

It will be noted in this Table that the numbers in the groups making four of more applications are too small to be significant, and for this reason they have been consolidated before calculating percentages. The rearranged figures with percentages are shown in Table 3.

TABLE 3

CONSOLIDATION OF TABLE 2 WITH PERCENTAGES CALCULATED

Number Applications Made	1	2	3	4 or More	*Totals*
Number Making Application	62	35	33	39	169
Ratings and %					
A Number This Group	4	3	1	8	16
% This Grade	25	18.8	6.2	50	9.5
% This Number Applications	6.4	8.6	3.1	20.5	
B Number This Group	21	8	8	8	45
% This Grade	46.6	17.8	17.8	17.8	26.6
% This Number Applications	33.9	22.9	24.2	20.5	
C Number This Group	28	18	16	20	82
% This Grade	34.1	22	19.5	24.4	48.5
% This Number Applications	45.2	51.4	48.5	51.3	
Failures					
Number This Group	9	6	8	3	26
% This Grade	34.6	23	30.8	11.6	15.4
% This Number Applications	14.5	17.1	24.2	7.7	

It will be noted, for example, that eight students who made four or more applications received a rating of "A" in the first year's work, and this constitutes 50 per cent of the total number of A's and repre-

sents the showing of 20.5 per cent of the group making four or more applications. At the other extreme is the group of failures. There are three of these, constituting 11.6 per cent of the whole group of failures by 7.7 per cent of the number who made four or more applications.

The decision to form the group which includes those making four or more applications was arbitrary, and was done so that the number in groups 2, 3 and 4 would be comparable. It will be noted, however, that the "3" group makes rather a poor showing, and would materially change those of group "4", if included with them. In other words, at what point does the "applicant" become "multiple". This point was discussed in our Admission Committee at some length; one of the members concluding that five or less was not "multiple" but "cautious". This Committee, through the Registrar, constantly advises applicants not to confine efforts to a single instruction. We feel that this is a human attitude in view of the heavy pressure made upon the schools in the large metropolitan areas.

In going over the material at our disposal it was at once apparent that a large number of the multiple applicants came from New York and vicinity, and it was equally apparent that most of these students were well qualified scholastically, as they constitute a considerable proportion of the "A" and "B" group.

If any conclusions can be drawn from the figures submitted it would appear that the "4 or more" group had done rather well.

The Scholastic Achievements of Multi-Applicants*

ALPHONSE M. SCHWITALLA, S. J.
Dean, St. Louis University School of Medicine

That the scholarship of multi-applicants differs in no pronounced way from that of uni-applicants, and that as a consequence the selection of freshmen in our schools of medicine is based on other factors than scholarship alone is the burden of this paper and the thesis which I expect to illustrate.

I.

The freshmen class admitted to the St. Louis University School of Medicine in the Fall of 1928 was unusually large. For the first time in a period of many years the personnel of the Admissions Committee had been partly changed. In past years, moreover, a number of students who had been accepted, sometimes as many as 15 or 20 per cent did not report and consequently the Committee on Admissions felt itself justified in accepting for admission a surplus number. In 1927, however, an unexpectedly large percentage of accepted freshmen matriculated and registered. Accordingly, the class assumed the unwieldly proportions of 186 freshmen students selected from over seven hundred applicants whose credits had been submitted and studied by the committee. Of this total number, 167 were new students who enrolled in any school of medicine for the first time, while seven matriculated and registered but did not enroll or left before the report of the school was submitted to the Association of American Medical Colleges and twelve were allowed by council action to repeat the freshman year. For the purposes of this paper, it was thought advisable not to separate these various groups, but to present the crude and not the claimed statistics.

As Table I shows, 78 of these accepted students or 42 per cent applied to St. Louis University only. Thirty-eight, or 20 per cent, applied to one other school; 14, or 8 per cent, to two other schools; 8, or 4 per cent, to three other schools; 8, or 4 per cent to four other schools; and 7, or somewhat less than 4 per cent, to five other schools. The remainder of 33 students, or approximately 18 per cent, applied to more than five other schools.

St. Louis University School of Medicine is still listed as adhering to the minimum admission standard of the Association. While the Admissions Council has repeatedly discussed the question of increasing these requirements, excellent reasons have urged the adherance to the official minimum standards. In the administration of this standard, however, the council of the school has enforced qualitative requirements

*Read at the Fortieth Annual Meeting of the Association held in New York, Nov. 7-9, 1929.

TABLE I.

STUDENTS ADMITTED TO FRESHMAN CLASS OCTOBER, 1928

Gross Figures

Percentage	No. of Students	Made application to
42	78	St. Louis University only
20	38	1 other School
8	14	2 other Schools
4	8	3 other Schools
4	8	4 other Schools
4	7	5 other Schools
	2	6 other Schools
	7	7 other Schools
	6	8 other Schools
	2	9 other Schools
	4	10 other Schools
	1	11 other Schools
18	2	12 other Schools
	2	14 other Schools
	2	15 other Schools
	2	16 other Schools
	1	18 other Schools
	1	22 other Schools
	1	24 other Schools

with increasing stress. Accordingly, of the 167 students entering medical school for the first time, 74, or 46 per cent, had already received the Bachelor's degree; 37, or 22.15 per cent, had completed three years of premedical studies, while only 53, or 31.73 per cent complied with the minimum admission standard only. Table II shows the premedical preparation of uni- and multi-applicants. Of the total number applying and accepted at St. Louis University only thirty-five, or almost half, had only two years of preparation, while 19 had already received their Bachelor's degree. The remaining 24 had three or four years of collegiate preparation.

TABLE II. PREMEDICAL PREPARATION OF APPLICANTS

Made application to	Two Years	Three Years	Four Years	De-gree	Total
St. Louis University only	35	19	5	19	78
1 other School	10	8	7	13	38
2 other Schools	2	2	1	9	14
3 other Schools	2	2	0	4	8
4 other Schools	3	0	1	4	8
5 other Schools	1	0	1	5	7
6 other Schools	0	1	0	1	2
7 other Schools	1	1	1	4	7
8 other Schools	1	1	1	3	6
9 other Schools	0	1	0	1	2
10 other Schools	1	0	0	3	4
11 other Schools	0	0	0	1	1
12 or more other Schools	0	2	0	9	11
TOTAL	56	37	17	76	186
	or 30.1%	or 19.8%	or 9%	or 40.8%	

The relative frequency of those who have received more than the minimum collegiate preparation increases among the multi-applicants. Only 10, or 25 per cent, of those who applied in one other school besides St. Louis University complied with the minimum requirements only, while as many as 13, or 33 per cent, had received their degrees. Similarly, of the group which applied to two other schools, out of a total number of 14, 9, or 63 per cent, had already received their degrees. Out of a total of 33 students who had applied to more than five other schools before being admitted to our own, 22, or 66 per cent, had already received their Bachelor's degree, while not a single one of these applicants presented only the minimum requirements. These diversities are probably to be expected. Of the thirty-five students presenting minimum requirements only, probably 70 per cent came from the College of Arts and Sciences of our own University. Most of these presented themselves for personal interviews to the Dean or other official. Moreover, since the departments of chemistry and biology are located in the building occupied by the School of Medicine, these students are fairly well known to the instructors in the school of medicine, and, accordingly, the Committee on Admissions felt more secure in their choice. There is here indicated a tendency to admit students from other schools only on the presentation of advanced credits.

II.

In presenting the scholastic achievements of multi-applicants as compared with uni-applicants, I shall do so

(a) by discussing the academic fate of the class as a whole;
(b) by presenting briefly the group studies according to the number of applications;
(c) by presenting several individual cases.

Table III presents the academic fate of these freshman students. Of the total number of 78 freshmen who applied to St. Louis University only, only 42 progressed to the sophomore year. Since in this group there were to be found the greatest number of those who had only two years of collegiate preparation, the result at the end of the year seems to indicate the inability of the ordinary two year college student to carry the responsibility of medical study in our school. While those applying to St. Louis University only constituted 42 per cent of those admitted, they constituted only 38 per cent of those promoted. The group applying to St. Louis University only, moreover, showed by far the greatest number of those who left school of their own accord in the course of the year and those who were dropped at the end of the first and second semesters.

This again affords evidence along the lines just indicated. A total of 34 students of those admitted after applying to St. Louis University School of Medicine only were considered unqualified for continuing the

TABLE III. ACADEMIC FATE OF FRESHMAN STUDENTS

Made application to	Promoted	Repeating	Dropped 1st Sem.	Dropped 2nd Sem.	Left School	Did no repor
St. Louis University only	42	2	8	15	9	2
1 other School	23	2	2	7	4	0
2 other Schools	9	0	0	3	2	0
3 other Schools	3	0	1	0	4	0
4 other Schools	4	0	2	0	1	1
5 other Schools	5	1	0	0	1	0
6 other Schools	1	0	1	0	0	0
7 other Schools	3	2	0	2	0	0
8 other Schools	4	2	0	0	0	0
9 other Schools	1	0	0	1	0	0
10 other Schools	4	0	0	0	0	0
11 other Schools	1	0	0	0	0	0
12 or more other Schools	8	2	0	1	0	0
TOTAL	108	11	14	29	21	3

study of medicine, 50 per cent, therefore, of those thus adjudged, whereas 33, or again 50 per cent, of those applying to other schools besides St. Louis University were similarly considered. It is clear from all this that while in the judgment of the Committee on Admissions there may have been some unconscious partiality in admitting students from St. Louis University, a similar partiality was not shown in allowing that same group of students to continue.

TABLE IV. GRADES OF UNI- AND MULTI-APPLICANTS PROMOTED TO SOPHOMORE YEAR

Made application to	Range of Grades	No. of Promoted Students in Group	Average Grade of Students in Group
St. Louis University only	From 70.0 to 84.7	42	75.9
1 other School	From 70.5 to 87.8	23	75.6
2 other Schools	From 72.5 to 82.0	9	77.1
3 other Schools	From 71.6 to 78.1	3	74.9
4 other Schools	From 75.8 to 84.4	4	79.9
5 other Schools	From 74.5 to 80.2	5	76.4
6 other Schools	From 80.1 to 80.1	1	80.1
7 other Schools	From 74.7 to 86.8	3	80.3
8 other Schools	From 72.4 to 86.4	4	79.6
9 other Schools	From 75.1 to 75.1	1	75.1
10 other Schools	From 73.1 to 80.4	4	77.1
11 other Schools	From 81.0 to 81.0	1	81.0
12 or more other Schools	From 74.2 to 81.4	8	77.1

If the various groups ranged according to the number of applications are studied, it will be seen that applications to one institution only on the part of the student can hardly be considered a safe criterion of scholarship. As may be seen from Table IV the range of grades for students applying to St. Louis University only was from 70 per cent to 84.7 per cent with an average grade for all the students in the group of 75.9 per cent. The most extensive as well as the highest range of grades was to be found in the group of those who had applied to one

other school, the range being from 70.5 per cent to 80.8 per cent, with an average grade of 75.6 per cent. On account of the smallness of the number of students involved, the range of grades as well as the average grade of the students are deemed nonsignificant for the other groups, but they are presented here for the sake of completeness.

Another way of approaching the same problem from a somewhat different viewpoint is to study the number of uni- and multi-applicants in the upper third, upper fifth, upper tenth and upper twentieth of the class. For this purpose certain omissions from the registration were made to simplify the presentation. Table V presents such a study. It will be noticed that while students who applied to more than five institutions constitute 27 per cent of the upper third of the class, they constitute 37 per cent of the upper fifth, 26 per cent of the upper tenth and 29 per cent of the upper twentieth. Among the highest ten averages in the class are to be found three who applied to St. Louis University only; two who applied to one other institution besides St. Louis University; one who applied to two other institutions; one who applied to seven; one who applied to eight and one who applied to fifteen other

TABLE V.

UNI- AND MULTI-APPLICANTS IN UPPER CLASS DIVISIONS

Made application to	Upper 3rd	Upper 5th	Upper 10th	Upper 20th
St. Louis University only	17	9	4	2
1 other School	5	2	2	2
2 other Schools	6	4	2	0
3 other Schools	1	0	0	0
4 other Schools	4	3	3	1
5 other Schools	2	1	0	0
6 or more other Schools	13	11	4	2
TOTAL	48	30	15	7
	or 27%	or 37%	or 27%	or 29%

institutions beside St. Louis University. Similarly, at about the middle of the upper third of the class are to be found three students, one of whom applied to 14, one to 16 and one to 18 institutions besides St. Louis University.

(c) This naturally leads to a discussion of some individual cases. The student making the highest average in the class in the combined subjects of the freshman curriculum had applied and was accepted by one other school only, finally choosing St. Louis University, but the student making the second highest average in the combined subjects of the class had applied to seven other schools, was rejected by three schools because classes were full, by two schools by reason of personality or poor scholarship, by one school because he could not meet the requirements of the particular school and by one school because he was supposed not to be able to meet the requirements of the Association.

A check-up of the last two statements, particularly, proved the utter incorrectness of the statements made to him in his correspondence with

medical schools. A check on the supposed "poor scholarship" of the student reveals the fact that while during his first two years his scholarship grade was probably a high C, during his last year of premedical study in one of our outstanding universities, out of a total of nine possible grades, he received one A, six B's, and two C's—the third highest average in the class was made by a student who had applied to eight other institutions besides St. Louis University. He was rejected by three institutions because the classes were full, by three because of personality or poor scholarship, by one because his credits were stated to be inadequate to meet the requirements of the particular school and by one because his credits, though probably adequate, had not been studied.

Regarding the supposed personality or poor scholarship of this student, the following may be illuminating: He was given his A.B. degree by one of our presumably most exacting universities. Throughout his four years in college he had received a grade of B or better in all biological and chemical subjects with the exception of one course in advanced organic chemistry. His English, it is true, was somewhat weak and his courses in physics might well have resulted in a higher grade, but recommendations of the highest order were received. The ninth highest average in the class was made by a student who had applied to fifteen other institutions before being accepted by ours. Eight schools rejected him by reason of full classes; five by reason of personality or poor scholarship; two because his credits had not been studied. This student had been given his A.B. degree by one of our large urban universities. His scholarship throughout his four years was probably of a medium C standing, but the remarkable thing is that a student of his premedical scholarship should be able to attain an average of 81.4 per cent in the collective branches of the freshman year, only 6.4 per cent below the highest average of the class.

Turning now to still another manner of approaching the subject, we might review briefly a few typical cases accepted by our school after being rejected by a very large number of other institutions. One student was refused by 24 schools and finally found a harbor in ours. Six institutions rejected him because of full classes; thirteen by reason of personality or poor scholarship; one because the credits were deemed inadequate for the requirements of that particular school and four because his credits had not been studied. This student received his A.B. degree from one of the outstanding state universities. In his scientific studies especially, he consistently maintained a fair average of C or better with the exception of one course in his freshman year. His grades, moreover, show progressive improvement. In our school this student passed in only two subject, histology and neurology, and was conditioned in anatomy, embryology, bacteriology and biochemistry, still he was one of the few who were allowed the option of withdrawing or repeating the freshman year.

Another student found a refuge in our institution after being rejected by 22 other schools—by seven because classes were full; by three by reason of personality or poor scholarship; by two, by reason of his failure to meet the requirements of that particular school; by ten, because his credits had not been studied. This student had completed 94 semester hours in one of our largest urban universities, had maintained an average of B throughout the three years in chemistry and biology, except in two of his courses, and had not been reported for a single deficiency throughout his three years of study. In our school he achieved a grade which placed him at the end of the upper third of his class.

One or two more exhibits might be interesting. Another student was rejected by 18 institutions before finding a home in ours. He had received his B.S. degree from one of the universities which has intensely studied the question of recommendations for admission to schools of medicine. The recommendation in his case reads: Scholarship, B; intelligence, B; ability, B; technique, B; initiative, B; moral character, B; personality, B; personal appearance, B. It is further stated that the candidate is recommended unqualifiedly. His scholarship achievement places him just short of the upper fifth of his class. Two other students who had applied to sixteen other institutions achieved a standing similar to the last case.

In general, the impression one gathers after reviewing case after case similar to the ones I have just summarized is this—that in admitting students possibly. Committees on Admission are inclined too readily to refuse students for the reason stated on the Association's card as "Personality and Poor Scholarship." It may be that a student is undesirable for extraneous reasons, but it seems to me that a sense of fairness might well dictate increasing caution in the employment of this classification.

Conclusions

On the basis of the facts presented in this paper I might summarize my conclusions as follows:

1. The fact that a student is a multi-applicant is no longer regarded as a stigma in our school.

2. The scholarship in the school of medicine of multi-applicants differs, as far as we have been able to discover, in no essential manner from the scholarship of the uni-applicant.

3. The Committee on Admissions in our school has found in our records no basis for a change of policy regarding the acceptance of multi-applicants.

4. There seems need in my own case a greater sincerity in assigning reasons for the rejection of students. I believe that the category "Rejected because of Personality or Poor Scholarship" is too easily used and the alternative presented in this caption seems in many cases unfair to a rejected student. Accordingly, it seems desirable to me that the

two ideas contained in this cause for rejection might well be separated into "Rejected by reason of Poor Scholarship" and "Rejected by reason of Personality."

Discussion
on Papers of Drs. Miller, Begg and Schwitalla

T. SOLLMAN, Western Reserve University: I desire to comment particularly on the question asked by Dr. Begg, as to whether it was the right thing to recommend to applicants, before we finally reject them, to apply to other schools.

I feel very emphatically that that is not only the humane thing and the right thing to do, but the only thing to do. Of course, there are certain students whom we consider very desirable, whom we can assure at the moment of the interview or when we have looked at their papers, that they will be accepted. In that case there is no reason why we should recommend to them that they apply elsewhere; but all those who do not come under that head have to compete with others for places. We feel that it is only right to tell them for their own protection they should put in several applications. We feel that the fact that we do so leaves us more free in our dealing with them.

This explains to some extent the apparently equal standing which the multiple application men are making. I think in the group that we would call the non-competitive or preferred, that is, the very desirable group, the scholarship would rank considerably higher than among those whom we could class as the competitive group. I have some data on that subject which I hope to present in one of the other discussions.

There is another point I should like to discuss. This was mentioned in Father Schwitalla's paper, the analysis and grouping of reasons for rejecting. We feel that there are only a few applicants whom we reject, absolutely, who are so distinctly undesirable that we would not take them under any conditions. When admissions are competitive, the man who does not get in is not necessarily rejected. When we do reject a man as undesirable, we would not care to publish an analysis of why that rejection is made. We refuse to do so to the applicants and I doubt whether we should do so to others. The reason is very often composite and relative, especially near the border line. For instance, a certain scholarship which would admit a man of certain personality or background or geographical location may not admit a man of a different personality; another applicant of the latter personality and a better scholarship would be admitted. It would be impossible really to classify these composite cases under single categories.

Under these conditions, the fact that students have made several applications should not be taken too seriously, as militating against them. We scarcely ever inquire of the applicants whether they have applied to other schools or not, except for the purpose of advising them to do so.

WILLIAM C. MACTAVISH, New York University, Washington Square College: I am the Chairman of the Committee on Recommendations of one of the colleges whose students send a great many applications to the various medical schools. I understand that the object of this discussion is to devise some method of reducing the number of multiple applications. I have found that the students whose scholastic average for three years of undergraduate work is over 80% seemed to have no difficulty in securing admission and it is not necessary for such a student to make many applications.

The student whose scholastic average is between 75 and 80% has great difficulty and must apply to a great many medical schools. It has been the policy of our committee to refuse to send applications to schools that have

special requirements such as four years of undergraduate work, geographical limitations, etc. Last year I eliminated about 200 applications in cases of that kind. We are firmly convinced that a student who has no chance of getting into medical school should be told so definitely. If the student has not had a good average in his undergraduate work we are reluctant to send recommendations and advise him to try another line of endeavor.

The studies given here today seem to show that the Admission Committees are perhaps influenced too much by the personal appearance of the applicant. I have noticed that certain of our own students make a good appearance, talk well and even though they have ragged scholarship records seem to have no difficulty in being accepted at some medical schools. Personal appearance is often the reason for refusing a candidate but this fact is not often stated. You as medical men can recall one or two of your acquaintances who have made a success in medicine who are of unfavorable personal appearance as far as good looks or physical development are concerned.

A big question that leads to a great number of applications is the Jewish student from New York and the vicinity. That question really has to be faced. I think there is no question that certain Admissions Committees are very unfavorably disposed toward such students. I think that this Association should consider the problem of educating these students. In some cases we do not recommend even students with very high averages. I have in mind a particular case of one who had a rather high average but who was refused recommendation despite his high scholastic average as he was perhaps the most unpopular man in his class. He was suspected of unfairness in examinations even though he had the ability to get good marks without doing that sort of thing. Personally he made a very bad impression and we would not recommend such a man.

Mention was made of applicants with the Master's Degree. I believe that the records of these applicants should be scrutinized very carefully. My own experience has shown that students who complete the three year pre-medical course and are refused by ten or a dozen medical colleges return to get the Bachelor's Degree and then reapply to medical schools. We try to discourage such students and in some cases refuse to allow them to continue. There is an increasing number of students with fair records who proceed to the Master's Degree at Columbia University and at our own institution. They then reapply to medical schools and often are accepted in place of men who have had only three years of pre-medical work but who would be more desirable candidates. The records of such students should be studied by the Admissions Committee of the Medical Schools very carefully. Of course, there are many students who get the Bachelor's Degree before applying to the medical school and what I have said should not lead to discrimination against these students.

J. J. MULLOWNEY, Meharry Medical College: There is one group of students which is given no place on your card and perhaps you do not need to consider it in your statistics. Meharry is for the colored group, and because it is the only school for the training of Negroes in the South, and is open to that group, we feel that we are in honor bound to keep every available space there for the colored group and yet every year we get, I should say between fifteen and twenty-five applications from men who are undoubtedly white and our reply to them is that every available space at Meharry is for Negroes.

There is no place for that information on your card. I imagine the same thing is true, in reverse, in many of the white schools. Some of the applicants are Negroes, and when you find out that they are, you say that the place is full or you give some other polite excuse. At the same time it does affect the statistics.

Then, again, most of these men of the white race who apply to us unfortunately are of the Jewish race. One such case was refused admission in a school very far North. The man came all the way from Albany, New York, to Nashville, Tennessee, and, very foolishly, brought his wife and two children, thinking he would get in at the last moment.

The laws are such in the South that we just could not accept him, although it pulled on my heart considerably to refuse him admission, and he had to go through a good deal and finally with the aid of the Jews in Nashville he did get in at Memphis.

There is an element here that we ought to consider, and I am glad somebody has stressed this thing of race and racial prejudice. It is a thing we ought to face like men and we should provide, as the last speaker said, some place for those who are turned back because of racial prejudice.

The solution of these problems so far as the Negro is concerned is for them as a group to save their money and invest it in medical colleges and real hospitals for themselves. The Jew has already shown the Negro the way —some of the Jewish hospitals are models of perfection and cleanliness.

L. B. WILSON, Mayo Foundation: The paper which I read at the meeting last year did show correlation between the undergraduate grades in preclinical studies and the clinical work done with us, but no correlation to amount to anything between the grades for work in pre-medical courses and those for clinical work done with us.

W. C. RAPPLEYE, Commission on Medical Education, New Haven, Conn.: There is one point that I picked up in my jaunt to Europe which relates to multiple applications and that is the number of men rejected in this country who apply for admission to the medical schools in Europe. At Edinburgh alone more than six hundred students from this country have applied this year, and in Great Britain the total is very large. I was able to get data on a random group of these students and found that most of them had applied to and had been rejected by a number of American schools. Some had not applied to any American schools, in certain instances they probably had been advised not to seek admission here because of the fact that only a portion of the total number of applicants are likely to be successful. The situation is puzzling the medical school authorities abroad for they are anxious to have some American students but not those who are unable to get into our schools. Quite a number of students who seek to transfer with advanced credit to European schools (some are successful) have been dropped from the schools in this country for poor work.

When I went to Germany, I made inquiries there, also, thinking that possibly a good many of the Jewish students would be in the German schools, but the figures I obtained showed that only nineteen Americans are studying medicine in Germany. From five to six hundred foreign students are studying for the university degrees in Paris, a small number of these are from the United States and Canada.

It is important that there be a more general understanding of this student problem for later these students who either were not admitted to the medical schools here or were dropped during their course will apply for licensure to practise in America after taking the medical course abroad. We are as anxious as the universities abroad to have an interchange of the very best students from each side of the Atlantic to promote mutual understanding and to secure the benefits which both can provide for student training.

M. H. MACKEITH, Oxford University, England: I very much regret I have no first-hand information or knowledge of this subject. We are in a rather peculiarly sheltered position at Oxford in that practically all of our applicants

from England are first-time applicants and I think all of the applicants for admission to our medical schools have already done very much better than the average in the medical schools from which they come. We are very glad to welcome them.

Medical Education a Liaison of Organized Effort

When the Federation at the last annual session delegated the matter of medical curriculum and medical training to the Association of American Medical Colleges, it exhibited a wise policy and some considerable courage.

It transferred a great responsibility to where it rightfully belongs. It was also an expression of confidence and recognition that it would be done best if centered in this one association.

The Federation has reserved for its principal duty and function, the determination of fitness for the practice of medicine and the enforcement of regulatory measures.

The American Medical Association representing the organized medical profession of America will always be the principal coordinating influence in advancing both medical education and licensure procedure.

It will accomplish this through the education of the public to the needs of properly trained physicians and surgeons and the stimulation of the profession to maintain the high standards of human service which constitutes its greatest achievement. Through its Council on Medical Education and Hospitals it will constantly affect a leveling influence on educational methods as well as developing the highest standards of medical practice.

As the child of these three great organizations, the National Board of Medical Examiners has come into being, established for the single purpose of developing by intensive study a comprehensive qualifying test for medical practice in keeping with the educational methods of this period. That its examination methods have been endorsed by forty state examining boards indicates that its formation has been justified.

As each association centers on the work for which it is best fitted and in the unity of their combined efforts, progress must continue and American medicine will advance as it never has before.—*Federation Bulletin*, 15:346 (Nov.) 1929.

State Boards and Medical Schools*

HAROLD RYPINS
Secretary Board of Medical Examiners
Board of Regents University of the State of New York

The business of medical education in the United States during the past two decades finds its closest parallel in the moving picture industry. Both are now among the wealthiest and most rapidly growing of our national enterprises. Medical education, like the motion picture business, has increased its capitalization by leaps and bounds; and the question of censorship, or at least regulation, has become increasingly acute in both fields. There was recently shown a motion picture with the title: "As God Made It," followed by the pertinent caption: "Passed by the Ohio State Board of Review." Is this the relation of our medical schools to the state board of medical examiners?

Function of State Boards and Medical Schools

Although it does not appear to be absolutely clear to many members of medical faculties and of boards, these two groups really possess one simple fundamental object in common, namely, the preservation of the public health. Failure to recognize this common aim has resulted in unnecessary confusion. I have met not a few members of state boards who were definitely of the opinion that their only function was to protect the medical profession; and I have met members of medical faculties who expressed the view that the main purpose of the medical school was to develop scientific research. It is a little difficult to find common ground between two such divergent expressions, but it exists, nevertheless; and it should be borne constantly in mind that we are striving toward the same end.

The State Board

Naturally, each of these groups has developed special functions, presumably subserving this common end. The activities of an efficient board of medical examiners include the examination and licensure of practitioners of medicine. This involves the important question of who shall be admitted to the licensing examination, the question of the proper preliminary and professional educational qualifications for such admission, and the registration of medical schools for the admission of their graduates. A state board is also concerned with the character of the licensing examination, whether it should be written, practical or both and what subjects should be covered. There is, as well, the matter of the licensure of physicians from other states, without examination. More and more the discipline of licensed practitioners figures in the work of the state board; and along with the revocation of physicians'

*Read at the Fortieth Annual Meeting of the Association held in New York, Nov. 7-9, 1929.

licenses for improper conduct, there is an increasing activity for the elimination from practice of unlicensed practitioners and quacks.

This is a large field, particularly when it is remembered that all this work is carried on by boards composed of practicing physicians, serving with little or no remuneration, and able to give only a relatively small amount of time; with an executive who is paid in some cases to devote half his time, but usually even less, to administrative duties. When it is added that the funds which support these varied activities are not only ridiculously small but vary in amount from year to year it is manifest that the state boards should be only too glad to delegate some of their responsibilities to bodies better prepared to cope with them.

The Medical Schools

On the other hand, the medical schools, apparently impoverished as only land-poor aristocrats can be impoverished, have their special obligations and functions. Besides serving as repositories for the medical and scientific learning of the past and for the development of medical and scientific research to carry forward medical progress, they are specifically charged with the arduous duties of educating medical students and training nurses. To an increasing extent they appear to be providing in one guise or another for the care of the sick in wards and dispensaries. Some of the more affluent schools have even recognized the necessity of providing proper quarters in which the students may dwell, far from the maddening crowd.

Relations of State Board and Medical Schools

This discussion of the relation of state boards and the medical schools can be appreciably simplified by setting aside from consideration those functions of each body which in no way overlap; namely, on the part of the schools, the custody of scientific knowledge of the past, the development of research and the care of the sick; and on the part of the state boards, the discipline of licensed practitioners, the prosecution of quacks, and the conduct of licensing examinations.

This leaves certain common ground between the medical schools and the medical boards, in which the right of eminent domain, as in the Holy Sepulchre in Jerusalem, is debatable. I shall attempt to dispose of the less difficult issues as briefly as possible.

Need for Licensing Examinations

The question has repeatedly been raised as to whether or not the degree of Doctor of Medicine from a medical school, a member of this Association, should not of itself carry the right to practice medicine, as is the case in certain European countries. My objections to this are practical ones only. In the first place, the medical examination which is now given in most states, places so little of a burden on the graduates

of acceptable medical schools that it is hardly worth while making a fuss about it. Secondly, medical examinations must be given to license the numerous foreigners who come to this country with educational qualifications more or less difficult to evaluate. Thirdly, some of our American medical schools (and this includes certain of the very most distinguished of them) have consciously or unconsciously encouraged certain students to specialize in research to such an extent that some of their graduates can hardly qualify as clinicians. The National Board examination is also solving many licensing difficulties.

Legal Authority of State Boards

By far the most practical reason, however, for continuing the state licensing examination is that under the law only that body which gives the right to practice medicine has the right to revoke such a license. The public health demands the existence of a body properly qualified and authorized to remove from practice certain obnoxious practitioners, and the board of medical examiners, charged with this unpleasant duty, has a right to simplify its labors by keeping out some of these individuals through the medium of the licensing examination. Lastly, the board of medical examiners, unlike most medical faculties, are made up of practicing physicians of experience and professional standing, and the point of view of the practicing medical profession with its common-sense traditions, is a valuable offset to certain scientific and educational vagaries which seize upon even the best medical faculties from time to time.

Rigidity of State Board Requirements

For some years many of the more progressive medical schools have complained of the rigid specifications as to subjects, and in some cases even the time to be devoted to subjects, enumerated in the laws or rules of the various state boards of medical examiners. It is alleged not only that a medical school can hardly give a curriculum which will satisfy the requirements for licensure in all the states of the Union, but that the schools are bound to a fixed type of training which allows neither progress nor reasonable experimentation. There is no doubt that twenty-five years ago inflexible state requirements were necessary to enforce proper educational standards upon the weaker medical faculties, practically all of which have now passed to their rewards. But even the most sanguine observers have felt for some time that no *a priori* curriculum could be written into the statutes which would not have outlived its educational usefulness almost as soon as the ink was dry.

A Loosening of Rigidity

The Federation of State Medical Boards has courageously recognized the fallacy of this type of legislation, for much of which they were themselves responsible; and at their last annual meeting the fol-

lowing resolution was adopted: "That in each state the medical practice act and its administration conform as far as possible with the educational principles of the Association of American Medical Colleges."

It is noteworthy that this resolution was the unanimous expression of the state boards represented at the Federation meeting and that it specifies not only the medical practice acts but their administration. The practical purport of this resolution is two-fold. In the first place, it indicates the intention of the administrative officers of the various state boards to act in conformity with the educational principles of the Association of American Medical Colleges. In the second place, it implies that where state statutes are to be modified, the principles of the Association of American Medical Colleges will be the guide in all matters relating to medical education.

Responsibilities of this Association

In response to the reasonable complaint of the medical schools, the medical boards have definitely indicated their desire to hand over to the Association the direction of matters pertaining to medical education. This revolutionary shift places certain responsibilities upon this body. The implications of that responsibility may be considered briefly under four heads. First, is this Association, in accepting and maintaining in its membership a given medical school, prepared to offer reasonable guarantees to the examining boards that such membership means the maintenance of proper educational standards in that school? Second, does membership in this Association imply with reasonable assurance that the component faculties will sedulously require and maintain proper educational standards for admission? Third, does membership in this Association imply that each of its constituent faculties, no matter how varied their curricula, is maintaining a professional educational standard adequate to prepare its graduates for the proper care of the sick? Lastly, and this subsumes the first three, is this Association prepared not only to establish and maintain educational standards, but to create the necessary administrative machinery for the study and direction of this important work?

A specific case will best illustrate my first head. Most of the state statutes require that before receiving the degree of Doctor of Medicine and being admitted to the licensing examination, the student shall complete four satisfactory courses of not less than eight months each, in four separate calendar years. A student of unusual promise completed about two-thirds of the first year's work in a component medical school. He then taught a laboratory science in another medical school and desired to complete his medical training in that institution. The dean of the second institution felt that this man's training was such that he could spend his time most advantageously by beginning at once on his third year's work without going back to complete the work of the first

year. The first institution which this student attended very properly refused to certify to the satisfactory completion of the first year's work, whereupon the problem was put up to the state board as to how this student might most expeditiously attain a medical degree without colliding with the statute. The typical bureaucratic state officer would probably reply that the only way he could do so would be to begin again at the beginning of his first year's course and take four consecutive years. On the other hand, the dean of the second school vouched for this man as one whose unusual preparation and capacity made it unnecessary for him to repeat this work and said that he would accomplish much more by taking advanced work. Upon whom should the fate of this student ultimately rest?

Responsibilities of Medical Faculties

Personally I have no hesitation in the matter! Any medical faculty qualified to be a member of this Association is a better judge of matters pertaining to medical education than the best state board, and the faculty of the particular school where any student is in residence is the best possible judge of the particular type of training suitable for that candidate. The responsibility in such a case as this should be placed directly upon the faculty that desires to train the student as a physician, and I believe the state boards would be more than willing to accept the statement of such a faculty that the students had completed four satisfactory courses in medicine, whatever their character, provided that faculty were prepared to assume this responsibility.

It may be argued that certain faculties might take advantage of this liberal interpretation, but I believe the time has come when the schools in membership in this Association should be considered adult institutions of higher education, competent to direct the work of their students and to be responsible for their proper training. Whether or not the particular faculty in this instance will prove willing to accept the responsibility I do not know. I believe it would make the responsibility much easier if such problems as they arise from time to time, might be submitted to some educational clearing house, maintained by this Association, so that the burden might be distributed and individual cases handled in the light of a general educational policy.

Educational Value of Migration of Students

A similar situation arises when a student in medical school A desires to spend a half-year, let us say, at medical school B, where the course in pathology, for example, may be particularly to his liking. Such migration of students has proved of unquestionable value in certain European universities, and should be much more encouraged. I see no reason why it should be necessary for such a student to obtain the sanction of any state board of medical examiners for such a migra-

tion, provided that the faculty of the institution of which he is a student will accept the responsibility of vouching for the training which he has received at the sister institution, after examining him in his subject upon his return. Again, such migration and exchange of students would be encouraged were this Association to serve as a clearing house of information concerning the value of specific courses in the various medical schools, and this cleaning house of the Association might well assume the responsibility of determining whether the course of pathology in a given school were acceptable for the training of students matriculated in any other constituent medical school.

Maintenance of Preliminary Educational Requirements

A similar problem arises in reference to the maintenance of proper preliminary educational requirements. However, in spite of the complaint that unusual students are barred from the study of medicine because of failure to comply with certain technical requirements for admission, the present minimum educational requirements for admission to any of the medical schools of this Association are low enough, so that the number of students who apply for admission, presenting these qualifications is greatly in excess of the number that can be accepted. While it cannot be denied that certain rare and brilliant men are barred on technicalities, practically all of them could make up their deficiencies in one year or less. Unless it can be shown that the present minimum requirements are really any more than the scientific alphabet necessary for medical studies, I think this Association will save itself much trouble by postponing any change in these requirements until more pressing problems have been solved. Ultimately, however, there is no question that this Association, rather than the state boards, is the proper body to make whatever changes prove desirable, and to modify the preliminary educational requirements from time to time as experience indicates.

Experiments in Education

The present minimum curriculum required for membership in this Association is still higher than that required by most state boards, or, at least as high. Fortunately, however, the Association has reserved the right to permit certain of its constituent schools to depart from this fixed curriculum upon the submission of approved plans for experimental variation. I think it may safely be said that, in general, it has been the better rather than the poorer medical schools that have availed themselves of this experimental freedom. As more and more schools request freedom from a fixed curriculum, however, the question of their ability to maintain proper professional training without direction becomes more pressing. It is difficult to see how this Association can extend its consent to further experimentation or liberation without possessing more accurate information than it now has, not only as to the

character of the school desiring such freedom, but as to the progress of established experiments as observed from time to time. Certainly, more information is necessary if this Association is to advise and guide its constituent faculties and to save them from experiments already proved unwise in other schools.

Educational Responsibilities of this Association

I have discussed briefly three educational functions which this Association must be prepared to assume if it is to maintain that supervision of medical education which is its prerogative. All of them indicate a practical problem for which I, at least, am not prepared to offer a practical solution. To undertake the responsibility for maintaining proper educational requirements in American medical schools; for making experimental studies in medical education; for providing inspection and the publication of reports which will assure the state licensing bodies that the Association of American Medical Colleges is in practice, as well as in theory, studying and guiding American medical schools, will require an administrative bureau with officers and funds to carry out these obligations effectively. The state boards of medical examiners are willing to continue the unpleasant responsibility of policing unlicensed practitioners, and are striving to convert this activity from an amateur to a professional basis. They appear willing to delegate to this Association the direction of all matters pertaining to medical education. They have a right to expect, and they will expect, your Association and its constituent faculties to accept this responsibility, not only in theory but in fact. Through me, as their representative, they are putting to you the blunt question—"Will you undertake this responsibility?"

Discussion

W. S. BIERRING, National Board of Medical Examiners, Des Moines, Ia.: When the Federation of State Medical Boards, at its meeting last February, resolved to delegate to this Association all matters of curriculum and medical education, it took a very significant and courageous action, because it recognized that this was the proper place for that function; and it reserved for itself the more unpleasant duty of determining fitness for practice and the enforcement of medical acts. It hopes that in the coming year it will again take a significant stand in that it will determine the basic principle of a medical practice act and endeavor by uniformity to have a general acceptance of this throughout this country.

It appreciates and places on this organization a great responsibility, but at the same time it hopes that it will have its help in furthering the purposes of the Federation and, therefore, it becomes your duty to be conversant with the restriction measures that are placed on medical practice, and we wish to direct your attention to a movement that is going abroad in the country, a political expediency but nevertheless something which affects medical practice, and that is the adoption of the so-called basic science act in five or six states and the District of Columbia, a regulation which proposes to keep out the irregular practitioner by having a separate board for examination in the so-

called fundamental or basic sciences, which has no requirement for admission to this examination. Anybody can take it and in that way you penalize the well-trained man to take an examination side by side with a man who possibly never saw a test tube or looked through a microscope.

If there were some way by which these boards would accept credentials, examinations made by properly constituted boards or institutions, then it would be another matter, but as it is, it penalizes, as I said before, the well trained student and makes him take an examination which is not necessary. It raises up the incompetent to our plane, and it is a distinctly backward step. We feel that both these organizations have taken a very forward step during the past year in forwarding the progress of medicine.

IRVING S. CUTTER, Northwestern University Medical School: I believe that this paper is without question the most forward-looking one and proposes the most forward-looking step that has been suggested to this Association in many years. I am not sure that it ought to be decided quickly. I am not sure that we can at this moment answer his four points affirmatively. I think we ought to answer the first three points definitely, yes, but we have a large program, if we answer these three points, in providing the necessary supervision, inspection, and so forth, that must go with it.

I can see very readily that this might be undertaken and might fail. On the other hand, if it were undertaken and it succeeded, it would be the greatest thing that could happen to American medical education.

I think we have been tremendously deluded in the past as to the advisability and the efficiency of the average state board examination. Frankly, if this Association cannot set up such a standard as should govern the actual practice of medicine, then we ought to go out of business.

Dr. Rypins has by this resolution strongly placed before us a challenge. I believe this Association should take it up carefully, thoughtfully, and work it out to a successful conclusion.

N. P. COLWELL, Council on Medical Education and Hospitals of the American Medical Association, Chicago: I think Dr. Rypins has touched on one of the most important topics in medicine at the present time.

Most of our state universities have established their own medical schools and are upholding certain standards of medical education and the state legislatures have voted large sums of money for their maintenance. Some of the same legislatures, however, inconsistently, have also provided legislation authorizing other types of practitioners with seriously inadequate training to practice the healing art. Would it not be well, therefore, to have the standard for the licensing of physicians in each state brought into harmony with those required by the state university medical school? In legislation intended to regulate the training of those who are to care for sick or injured people, the educational standards should be no less than those established for the practice of medicine. If boards are to be provided in the basic sciences, would it not be well to have their enforcement placed directly in the hands of the state universities inasmuch as the latter are at the head of all educational matters in the state? That would put all licensure matters in the hands of those best qualified to decide in regard to them.

H. L. RYPINS, Albany, New York: This is not the time nor the place to discuss the basic science law, but I was particularly asked by the president of the Federation to voice the sentiment strongly against those laws and urge on the members of this Association an obligation to use influence in stopping the spread of that type of useless legislation.

Teaching of Therapeutics

LINN J. BOYD
Professor of Internal Medicine, The New York Homeopathic Medical College

The frequency with which articles on this subject are published apparently indicates greater interest than an examination of the catalogues of many medical colleges might suggest, and implies that teachers are as dissatisfied with the results obtained as are recent graduates. The purpose of this article is merely to allude to some phases of the subject which have not received the emphasis they merit.

If one of the purposes of a medical college is to graduate physicians well trained to care for the sick, it must be admitted that we fail in this respect if an observation of interns recently graduated from various medical colleges can be used as an index. There is probably no other equally important department of medicine in which lack of preparation is more painfully obvious. This may be observed when an intern is asked to submit a plan of therapeutic management for relatively simple medical conditions. This is doubly surprising since therapy has a universal appeal among students; its items are highly treasured and usually well retained. Since the student reflects to a great extent the ideas to which he is exposed, it would seem that any shortcomings must be placed at the door of the faculty and their methods.

Chief Aim of Therapeutics

While there is general agreement that the chief aim of therapeutics should be practicability, little has been done toward achieving this end, although some forms of clinical clerkships represent steps in this direction. It may seem elementary to remark that students learn therapeutics only by trying therapeutic measures. A comparison to another subject may save many words. A teacher could lecture for many days on the chemistry of gun powder, the physics of an explosion, the mechanics of a rifle and the trajectory of bullets, but the student will never learn to shoot clay pigeons except by aiming the gun and pulling the trigger. While the initial percentage of misses may be high, this can rapidly be reduced under supervised instruction. In a similar manner, the art of therapeutics cannot be taught by hearsay but only by practice at the bedside or in the clinic.

Progress of Pharmacology

Much criticism has been directed at pharmacologists for the poor preparation of medical students in therapeutics. In my opinion, the pharmacologist is at fault only in so far as he has attempted to teach

therapeutics. Even a superficial survey of the progress made by pharmacology during the past twenty years will reveal that men in this field have devoted increasing attention to broad biological principles and that pharmacology has been assuming a pure or scientific aspect without being essentially concerned with the immediate or practical applications of their results.

The frequency with which the departments of physiology and pharmacology are combined in medical schools also suggests that most modern pharmacologists are "physiologically" trained or minded. An examination of the subject matter of textbooks of pharmacology and therapeutics (not therapeutics) written by pharmacologists also indicates the chief interest of these men.

While there is absolute unanimity of opinion that pharmacologists have been and are of inestimable value to science, the rationale of having a man who has never had medical training or who, having had sufficient medical training to secure a degree, has never practiced medicine, and, therefore, has not encountered therapeutic problems at the bedside daily, is not apparent. It would seem that such a course is not only an imposition on the pharmacologist but perilous to the student. If pharmacology is to be taught as an undergraduate subject much of the material now given could be omitted and an equal amount placed in the hands of clinical pharmacologists, by which I mean teachers of pharmacology who have had clinical training, and who possess clinical ability and facilities and whose chief interest lies in the application of drugs to the treatment of the sick.

Clinicians Are Not Pharmacologists

Since it may safely be assumed that the student does not learn much of value in pharmacology for the purposes of therapeutics, it is frequently presumed that the clinical teachers will supply information on this subject. This assumption is by no means universally warranted and incidentally the clinical lecture may be as dangerous as the didactic lecture in this respect. I have repeatedly attended clinical lectures given by capable men and have seen, for example, a case of lobar pneumonia demonstrated. After reading the history, the physical and laboratory findings, the lecturer would spend fifteen or more minutes discussing bacteriology; and an equal length of time on pathology, an interpretation of laboratory reports, diagnosis, differential diagnosis and at times prognosis. At this juncture the case is dismissed. It is not to be inferred that these subjects are without importance, nor will the question be raised as to how much of this material is pertinent to the case and needs discussion by the internist. The point we are endeavoring to stress is that therapeutics was not mentioned at all. Should a student timidly ask what is being done, or what should be done from a therapeutic standpoint, he is answered that one does not treat pneu-

monia but treats symptoms as they arise. Just how this is accomplished the student is not informed.

It seems to me that the presentation of a case is not completed with the diagnostic decision but only when the therapeutic regimen has been outlined. The point that may be worth remembering is that if therapeutics is placed in the hands of clinicians it does not necessarily follow that the subject will receive better consideration, unless clinicians are made thoroughly aware of their responsibility in this respect. It must be assumed, for example, that the professor of pathology is confident to teach pathology, and that time spent on pathology not pertinent to the diagnosis nor suggesting indications for treatment leaves less time for the consideration of subjects belonging to the domain of the internists.

Need for Better Therapeutics

Instructors in therapeutics, frequently assume a knowledge on the part of the student which is not justified. In the undergraduate days the student may hear a therapeutic procedure mentioned and as an intern he may correctly order it from the nurse. But, on reaching private practice he may be hopelessly lost if he attempts to supply the directions for carrying out the procedure.

One example of this kind was indelibly impressed on my mind by Hobart A. Hare, whose pleas for practical therapeutics are well known. During the World War a number of recently graduated physicians from many different medical colleges were sent to Jefferson Hospital for instruction, and on this particular day typhoid fever was being discussed. Every man present had definite and accurate ideas on the epidemiology and pathology of typhoid fever, but not one could answer the question—how would you make a turpentine stupe? I am positive that had the question been asked on almost any equally simple and commonly used and important therapeutic procedure these doctors would have been equally uninformed. It is common knowledge that interns, as a rule, do not know whether the dose mentioned is a daily dose or single dose, how often it is to be repeated nor under what conditions. While this would seem to be merely emphasizing the necessity of being practical in therapeutics it is intended to emphasize that students usually do not possess information upon subjects which they are presumed to know.

Who Shall Teach Therapeutics?

The stress laid on therapeutics might be taken to imply the necessity for a separate department of therapeutics. I would consider this a serious mistake. The therapeutic specialist does not exist, so far as I know, and it is fallacious to assume that any individual is capable of covering the subject in all of its ramifications. I have seen teachers of therapeutics recommend a particular dusting powder for a dermato-

logical patient which any dermatologist would know would cause only crusting and infection beneath the incrustation. Therapeutics is an art which can be taught correctly only in connection with a patient and by men fitted through experience in the particular phase presented. A therapeutist covering all branches of medicine or a department solely devoted to general therapy constitutes, in my opinion, more than a potential danger.

Therapeutic Nihilism

Finally we approach and with some hesitation a point which is extremely delicate, namely the viewpoint of the teacher in the clinic. Many teachers give an impression of therapeutic nihilism which is based largely upon a pedantic interpretation of the word cure. The number of conditions for which we possess entirely satisfactory therapeutic procedures is still admittedly small. However, the number of conditions which cannot be ameliorated and made more supportable until death or recovery occurs is likewise small. To state that no cure for chronic tubuloglomerular nephritis is known is true, but to infer that nothing of value can be accomplished by therapy is equally false. In short, students are too often given an unjustified nihilistic impression or are given some working tool without the necessary instruction for its proper use. The doctor in practice should, of course, know whether or not a condition is "curable" but he is also entitled to know what manifestations can be completely or partially eliminated and by what means this can be accomplished.

Many may read these remarks and more or less agree with the statements but feel that the whole discussion is unnecessary and that the intern year is the one in which therapy will be learned. Even if this latter position is tenable, I sincerely doubt that the men reaching it are properly prepared for it. While it is my opinion that the subject of therapeutics cannot be taught apart from all other subjects in medicine, and that there is room for its logical, systematic and thorough presentation in the undergraduate curriculum the subject is too large to be presented at this time.

Province of Undergraduate Pharmacology

In summarizing these remarks which are intended to stress only a few of the manifold aspects of teaching therapeutics, it is my opinion that the situation will be improved by realizing that the province of undergraduate pharmacology is to prepare students for the practice of medicine by arranging its subject matter so that the portion taught is preclinical in the real meaning of the word; that it should be taught by men whose primary interest and whose training has been in the field of the application of the facts of pharmacology to the treatment of the sick; that, regardless of the methods employed, each instructor should teach practical therapeutics in as definite a manner as the sub-

ject matter allows; that simple and commonly used procedures be given at least as much attention as complex and rarely used ones; that clinicians realize their responsibility in the matter of teaching therapeutics and allot time for this purpose commensurate with the importance of the subject; that the physician in practice is concerned largely with diagnosis only in so far as it furnishes indications for rational treatment; that above all, therapy must be taught only or at least best at the bedside or in the clinic.

Conjoint Examining Board for Canada

The Committee on Education of the Canadian Medical Association is of the opinion that:

1. The graduates in medicine from the Canadian Universities have received an education which adequately fits them to enter the practice of medicine at the end of their course.

2. The student who has completed his medical education in a Canadian University should be able to obtain his university degree and his license to practice by passing an examination in the final subjects conducted by a Board of Examiners composed of representatives from (a) the Universities and (b) the Medical Council of Canada and the Provincial Medical Councils.

3. The introduction of such a Conjoint Examining Board for final examinations would result in the maintenance of a high standard for qualification for both the degree and license and at the same time save the student both time and money.—*Canadian M. Assn. J.*, Sept., 1929.)

Some Tenets of Medical Education

The quality of instruction in a medical school may be somewhat accurately judged by the provision made for the proper grounding of its students in modern medicine. Not only is it incumbent upon medical schools properly to teach the art of the practice of medicine, but also it is equally important to encourage in students an enthusiastic, discriminating attitude towards the problems of medicine.

As far as the graded curriculum is concerned, it is of course essential that knowledge of anatomy should precede instruction in physiology and pathology, but it is hardly necessary that much anatomy should be given to medical students before they enter upon their courses in bacteriology and physiological chemistry. Essential, as it is, that anatomy should be the first subject of medical instruction because on morphology depends so much of subsequent medical teaching, there is still another reason for the anatomist to cherish this position in the medical curriculum.

This basic reason largely has to do with the opportunities before the medical teacher when the students are introduced into professional education, for the anatomist really has never felt himself limited to his field of medical instruction—greater dreams have always been before him. He wishes to cultivate a method of thinking, and while he glibly uses the term "teach," he really feels that he can teach but little: all he can do, in the final analysis, is to offer the best possible opportunity for the student to learn. In the dissecting room and in the histological laboratory, the anatomist tries to present his particular subject as a problem in science. The student is provided with the material, whether it be the human cadaver, whether it be the microscopic section or the fresh preparation to be studied histologically; and by precept, the student is given a method of analysis, with scalpel and forceps or with microscope and teasing-needle. The teacher acts merely as a type of directional agent, steering the student away from the hazards of careless work which result in the ruin of material, and leading him into the more profitable ways of scientific analysis.

Primarily, the anatomist seeks to arouse in the student what we like to term "the spirit of inquiry"—the spirit of scientific curiosity. The success of the teacher is largely dependent upon his ability to incite and foster this spirit of inquiry, for unless the student soon acquires this questioning habit of mind, he will go through the courses of instruction in a somewhat blind way, learning ultimately tricks of medical diagnosis and therapy, but without essential understanding of the true function of a student of medicine. So the anatomist, because of the early need of morphological knowledge and because of the peculiar materials of his subject, feels that he has an unique opportunity to allow the student to learn something of a particular science, to direct his efforts, and to lead him to develop his own scientific curiosity.

Such a spirit of inquiry is needed not only in the course in anatomy and in the other preclinical sciences, but it constitutes an essential element of the most desirable attitude towards the art of the practice of medicine. The anatomist, piloting this college student at the inception of his medical course, feels that anatomy must of course be presented in a truly professional way. Although the professional school has limitations with which the graduate school of a university is not primarily afflicted, the best instruction in the medical curriculum is today of the same type as in the graduate departments of the natural sciences, or of the humanities. In all of these university subjects of learning, the student is given the opportunity to acquire some of the basic data of the problems of one of these fields. He studies the hypotheses, the speculations, the tenets, the deductions which have been drawn from the data already gathered, but he is not forced to accept any of the conclusions. He is taught the limitations of deductive and inductive methods, but he is allowed to make up his own mind regarding the many unsolved questions of that branch of knowledge.—Lewis H. Weed, *Johns Hopkins Hospital Bull.*, 24:204 (Oct.) 1929.

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The New York Meeting

The fortieth annual meeting of the Association has the distinction of having had the greatest number of colleges in membership represented by one or more delegates—*SEVENTY!* Only seven colleges were not represented.

From many points of view this was an exceptionally good meeting! Many colleges were represented. The attendance was very large. The interest displayed was all that could be desired. It was the first time in the history of the Association that a joint session was held with another organization—the Association of American Universities. Many more reasons could be given why this was "the best" meeting. The local arrangements were perfect, thanks to the chairman of the local committee, Dr. Frederick T. van Beuren, Jr. No effort was spared to make everybody happy and to ensure the success of the meeting.

All the papers read were well received and elicited much discussion. It would be extremely difficult to attempt to say which was the best paper. They were all good. In the course of the next year, the readers of the JOURNAL will be given opportunity to decide for themselves which paper, in their opinion, is deserving of such a choice.

One school, the School of Medicine of Temple University, Philadelphia, was voted into membership. Two schools, the Medical Department of the University of Arkansas, and the University of Rochester School of Medicine and Dentistry applied for membership. These two applications were received too late to be acted on at this meeting; hence action had to be postponed until the next meeting. The membership of the Association is now 78.

Denver was chosen as the place of meeting for 1930. The Executive Council has set October 14, 15 and 16 for the time.

The Journal

At the fortieth annual meeting of the Association held in New York in November, it was decided that beginning with the present issue of the JOURNAL publication be made bimonthly instead of quarterly, as heretofore. Furthermore, the number of reading pages will be reduced from 96 to 64 to insure sufficient material for six issues.

More frequent publication was decided on because it was considered of vital importance to speed up the publication of papers read at the annual meetings, and the discussions thereon, to increase the news value of the JOURNAL, and to stimulate the interest of the readers in this publication—not that interest is lacking, for that is assuredly not the case, but because three months is a long time between issues, too long a time, as a matter of fact. It affords too much opportunity to forget that further issues are impending.

There was unanimous opinion on the value of this JOURNAL to the teachers in the medical schools in this country and abroad, and that discontinuance of its publication would be an irreparable loss to medical education. It is the only publication of its kind in the whole world, and it is supported entirely by the medical schools.

Without a doubt the 12,000 members of the faculties of the medical schools of the United States and Canada can support a monthly publication, but until that fact is demonstrated beyond peradventure of doubt by the submission of suffi-

cient manuscript to fill the pages of a monthly, bimonthly publication will be continued. The editor will greatly appreciate any help given in the way of material for use in the JOURNAL.

Officers for 1929-1930

The new president of the Association is Dr. William Darrach, dean and professor of surgery in Columbia University College of Physicians and Surgeons. Dr. Darrach has been actively identified with the work of the Association for a considerable number of years, and has served creditably on committees of various kinds. He has always had the interest of the Association at heart, and has rarely missed a meeting, and then only because of illness or some equally sufficient reason.

Dr. Maurice H. Rees, dean and professor of physiology in the School of Medicine of the University of Colorado, was elected vice president. Dr. Rees, too, has attended the meetings of the Association for many years and has served with distinction on the Committee on Education and other committees.

Dr. Fred C. Zapffe was re-elected secretary.

Dr. Irving S. Cutter, dean of Northwestern University Medical School, was re-elected a member of the Executive Council and was also chosen to serve as chairman of that body.

Dr. E. P. Lyon, dean and professor of physiology in the University of Minnesota Medical School, was elected a member of the Executive Council for the next biennium.

Committees for 1929-1930

The following committees were appointed at the annual meeting; Committee on Study of Aptitude Tests: Torald Sollmann, chairman; H. G. Weiskotten; William Darrach; Ben Wood and F. A. Moss.

Committee on Intern Training: Irving S. Cutter, chairman; C. A. Bass; C. R. Bardeen; A. C. Bachmeyer and Harvey Cushing; the president and secretary being asked by the committee to serve ex officio.

Committee on Nurses Training Schools: This committee was continued. It consists of C. P. Emerson, chairman; A. C. Bachmeyer and A. M. Schwitalla.

Committee on Medical Education and Pedagogics: This is a standing committee. Its personnel was reappointed: H. G. Weiskotten, chairman; Livingston Farrand; E. S. Ryerson; John Wyckoff and Frederick T. van Beuren, Jr.

Pertinent Questions

In his paper read at the annual meeting and published in this issue of the JOURNAL, Dr. Harold Rypins asked some very pertinent questions:

First, is this Association, in accepting and maintaining in its membership a given medical school, prepared to offer reasonable guarantee to the examining boards that such membership means the maintenance of proper educational standards in that school?

Second, does membership in this Association imply with reasonable assurance that the component faculties will seduously require and maintain proper educational standards for admission?

Third, does membership in this Association imply that each of its constituent faculties, no matter how varied their curricula, is maintaining a professional educational standard adequate to prepare its graduates for the proper care of the sick?

Lastly, is this Association prepared not only to establish and maintain educational standards, but to create the necessary administrative machinery for the study and direction of this important work?

Honor System

Dr. Ivan E. Wallin, who contributed a paper on "The Honor System in the Medical School" in the JOURNAL (Vol. 4, No. 4, Oct., p. 317) asks that the following correction be made:

The honor system has been in successful operation in the University of Virginia Medical School since 1842—a fact not mentioned in the paper.

College News

University of California Medical School

The University has provided consultation rooms in connection with its clinic at Second and Parnassus avenues, San Francisco, so that students in the upper classes will have an opportunity to study patients from a broader point of view, taking into consideration those social and economic factors which may have some connection with their complaint.

Mr. and Mrs. George H. Roos, San Francisco, have made an additional gift of $5,000 to equip a clinic in connection with a study of thoracic surgery and cancer for which they recently gave $100,000. The laboratory work in this study will be done at the Hooper Foundation for Medical Research. Plans for expansion of the hospital and the erection of new medical buildings have been ready for ten years, but funds have not been available.

The university proposes to enlarge its clinics at Second and Parnassus avenues, by the construction of a modern clinic building, provided the state will appropriate the necessary funds. A site just below the old clinic, about half a mile from the geographic center of San Francisco, has been purchased. The building will be connected with the University Hospital and other clinics by means of tunnels.

The Semi-Annual Alumni Day was held November 22. The program was an excellent one. The attendance was gratifying to those who made the necessary arrangements for the day.

Loyola University School of Medicine

The university has by affiliation assumed teaching control in St. Anne's Hospital and St. Elizabeth's Hospital, the combined capacity of which is 500 beds; Loyola will also be responsible for the new Lewis Memorial Maternity Hospital, which will provide special work for students in obstetrics and pediatrics.

University of Maryland School of Medicine

Appointments and Promotions: Harry Friedenwald, emeritus professor of ophthalmology; Clyde A. Clapp, professor of ophthalmology; Edward A. Looper, professor of diseases of the throat and nose; Melvin S. Rosenthal, professor of dermatology; Robert W. Johnson, Jr., professor of orthopedic surgery; Jesse W. Downey, Jr., professor of otology; Charles Loring Joslin, professor of clinical pediatrics; Charles Reid Edwards, clinical professor of surgery; Waitman F. Zinn, clinical professor of diseases of the throat and nose; Harvey K. Fleck, associate professor of ophthalmology; Louis A. M. Krause and Harold R. Peters, assistant professors of medicine; Milford Levy, assistant professor of neurology; John H. Traband, Jr., Clarence E. Macke and Albert Jaffe, assistant professors of pediatrics; Edward S. Johnson, associate professor of surgery.

New York Hospital and Cornell Medical College Association

Dominating the group of thirteen buildings to be erected between Sixty-eighth and Seventy-first streets along the East River will be a twenty-four story hospital. West of it will be the Cornell Medical College, and east of it a maternity hospital, a children's hospital and a hospital for mental and nervous diseases. The nineteen story nurses' home will be between Seventieth and Seventy-first streets, and in that block, also, will be the power plant, quarters for employees, garage and other service buildings.

The entire plant, fireproof throughout, is designed to provide the most modern facilities for practically every service needed in the care of the sick, for research, the training of physicians, and

the preparation of graduates for teaching positions. There will be beds for about 1,000 patients, accommodations for about the same number of outpatients a day, facilities to train about 300 undergraduate medical students, and a home which will accommodate about 500 nurses.

The first eleven floors of the central building will be a general hospital; the twelfth to seventeenth floors will be a hospital for private patients, and the upper floors will be living quarters for resident physicians. The two southern wings of the general hospital section of the main building will be devoted to wards, one of the northern wings to outpatient work, and the other north wing to occupational treatment, hydrotherapy, physical therapy and chemotherapy and the roentgen-ray department. The main operating rooms will be on the tenth and eleventh floors. The private patient floors will be a self-contained hospital by themselves.

The psychiatric institute flanking the main building and facing Exterior street, will have 116 beds, and will collaborate with the Bloomingdale Hospital in treating the mentally ill, and in teaching and research. The 156 bed institute for maternity cases which will be a memorial to the late Laura Spelman Rockefeller will take over the activities of the Lying-In Hospital.

A third special institute is planned for the care of children, and teaching and research in children's diseases, but no special funds for its endowment have yet been provided. The 125 bed pediatric institute built between the maternity and the psychiatric institutes will be joined to the main hospital building.

In the part of the central building which connects with the medical college buildings will be laboratories for research on problems most closely associated with the care of the sick. The pathology building of the medical college, which will face York avenue immediately adjacent to the main hospital, will house also the central medical library and the administrative offices of the medical college. Extending from it will be four buildings for the departments of anatomy, pharmacology, biochemistry, bacteriology and physiology. The clinical department will have classrooms and laboratories throughout the hospital units.

The New York Hospital-Cornell Medical College Association proposes to unify teaching and hospital work throughout the entire institution. The joint administrative board of the association, the chairman of which is Edward W. Sheldon, comprises three governors of the New York Hospital and three representatives of Cornell University; the seventh member is J. Pierpont Morgan. The executive officer of the board is Dr. G. Canby Robinson.

University of Toronto
Faculty of Medicine

James Metcalfe MacCallum resigned as professor of ophthalmology and head of the department at the end of last session.

W. H. Lowry has been appointed professor of ophthalmology and head of the department.

D. N. Maclennan resigned from the department of ophthalmology.

Hardolph Wasteneys has been appointed head of the department of biochemistry. Professor Wasteneys takes the place of Dr. Andrew Hunter who resigned at the end of last session to become professor of physiological chemistry at the University of Glasgow, Glasgow, Scotland.

George S. Young of the department of medicine has resigned.

Herbert D. Key has been appointed associate professor of biochemistry.

University of Pittsburgh

An additional $400,000 has been received ($500,000 previously contributed by Maurice and the late Leon Falk) for the construction of the Falk Medical Clinic in the university hospital group.

Mayo Foundation

The last five of the series of lectures on physiology and physiologic chemistry by eminent European professors of these

subjects was presented during the month of October:

Friedrich Verzar, professor of physiology, University of Debreczen, "The hormonic regulation of the number of red blood corpuscles." Leon Asher, director of Physiological Institute, Berne, "New facts on the physiology of the thyroid glands," and "The action of specific diuretics and the secretion of urine under physiological conditions." Karl Thomas, director of Physiological Institute, Leipzig, "Metabolism of food and tissue protein." (2 lectures).

University of Chicago

The cornerstone of the new Chicago Lying-In Hospital and the adjoining septic pavilion on the campus of the University was laid November 5, at a ceremony performed by Dr. Joseph B. De Lee, who has been medical director of the hospital since its foundation. Others participating were President Hutchins of the university, and Mrs. Kellogg Fairbank, president of the hospital board. There is said to be $1,800,000 on hand to defray the cost of building the new hospital.

Dr. Joseph B. De Lee was appointed professor of obstetrics and gynecology and chairman of the department.

Other appointments in this department at the University of Chicago include Dr. Fred L. Adair, Minneapolis, as professor of obstetrics and gynecology, and Dr. Eloise Parsons as assistant professor of gynecology.

Dr. Howard J. Holloway has been appointed a clinical associate in obstetrics and gynecology at Rush Medical College.

Dr. Rudolph W. Holmes has resigned as professor emeritus in the department of obstetrics and gynecology of Rush Medical College.

Stuart McGuire Lectureship

In recognition of his long service as president of the Medical College of Virginia, Richmond, from which Dr. Stuart McGuire retired on July 1, 1925, the board of visitors of the college has established the McGuire Lectureship which will be filled annually by an invited speaker. The subjects of the lectures will usually cover topics related to medicine, dentistry, pharmacy, or nursing, the fields covered by the several schools of the institution.

University of Alabama

A far-reaching program of coordinated effort by four state agencies, calling for the establishment of a school of social work, a school of medicine, a school of nursing and a school of dentistry, was placed before county health officers of Alabama at their tenth annual meeting by Dr. Stuart Graves, dean of the school of medicine and acting state health officer, and Mrs. T. F. Adams, executive secretary of the state child welfare department, representing Mrs. A. M. Tunstall, director of the department.

Mr. James Van Antwerp, of Mobile, has presented to the University of Alabama School of Medicine a portrait of Dr. Josiah Clark Nott, one of the founders of the Mobile school, after whom the present medical building on the University of Alabama campus at Tuscaloosa is named. The portrait was painted by Mader, an artist in Mobile.

De Lamar Lectures at Johns Hopkins University

The following series of De Lamar lectures in hygiene at the School of Hygiene and Public Health of the Johns Hopkins University is announced for the session of 1929-30:

November 12. Park Lewis, M. D., Buffalo, N. Y., "The Adventure of Sight-saving."

December 3. E. L. Bishop, M. D., Nashville, Tenn., "Tennessee's Child Health Program."

December 17. Stewart Paton, M. D., Johns Hopkins University, "The Art of Living."

January 7. H. Gideon Wells, M. D., University of Chicago, "The Relation of Heredity to Human Cancer."

January 21. A. S. Warthin, M. D., University of Michigan, "The Distribution of Latent Syphilis in the Population."

February 4. M. E. Barnes, M. D., International Health Division, Rockefeller Foundation, "Problems or Duties of a County Health Officer."

February 18. Peter Olitsky, M. D., Rockefeller Institute for Medical Research, "Studies on the Bacteriology of Epidemic Influenza."

March 4. Henry F. Helmholz, M. D., Mayo Foundation, "Preventive Pediatrics."

March 18. Henry B. Ward, Ph. D., Sc. D., University of Illinois, "The Introduction and Spread of the Fish Tapeworm in the United States."

Johns Hopkins University

Francis P. Garvan, the president of the Chemical Foundation, New York, has endowed a chair of chemical education which was dedicated October 11. At the same time a plan was inaugurated to provide eventually for the training of exceptional students from each state. So far, there are nineteen such scholarships available and they have been provided by industrial concerns, research foundations and individuals. Joseph S. Ames, LL. D., president of Johns Hopkins, in inaugurating the scholarship plan, said that there is a conviction that the hope of the future advancement in science lies not in the average student but in the student of exceptional ability and character, and that our educational system must provide for the complete utilization of the unusually gifted student. The first to hold the Garvan chair for chemical education is Neil Gordon, Ph.D., for many years professor of chemistry at the University of Maryland. At the ceremony acknowledgement was made of gifts totaling $500,000 as a nucleus to be devoted to the training of chemists.

Prof. Otto Warburg of the Kaiser Wilhelm Institute, Berlin, Germany, gave the nineteenth course of lectures of the Herter Foundation, October 19, on "The Enzyme Problem and Biologic Oxidations." This lectureship was endowed in 1902 by Dr. and Mrs. Christian A. Herter of New York to promote a more intimate knowledge of the researches of foreign investigators in the realm of medical science.

University of Virginia Medical Department

A group of medical buildings recently completed at the University of Virginia at a cost of $1,400,000 was dedicated October 22. The principal building of the new group is for the medical sciences. It is connected with a 275 bed hospital by corridors. In the south wing will be the departments of biochemistry, pharmacology and materia medica, physiology, histology, embryology and photography. In the north wing will be the outpatient department on the first floor; the museum and library on the second; pathology and bacteriology on the third, and the neuro-anatomy laboratory on the fourth. The west wing is a connected pavilion with an amphitheater two stories high. The first floor of the west wing has the record room, drug room, lecture rooms, and examining and sterilizing rooms. The department of clinical pathology and a cardiac laboratory are on the second floor; laboratories for gross anatomy and surgical pathology are on the third, and on the top floor is the department of public health and hygiene. The construction of this building in such close proximity to the hospital necessitated extensive changes in the hospital and the moving of another large building. The architecture harmonizes with the Jeffersonian style of the original group of the university. Friends and alumni gave $350,000, the state of Virginia, $250,000, and the General Education Board, $800,000 toward the cost of the new buildings.

University of Cincinnati

The university has recently announced the development of a new laboratory of applied physiology in its College of Medicine, the joint gift of the Ethyl Gasoline Corporation, the Frigidaire Corporation, and the E. I. DuPont de Nemours Company.

The laboratory will be supported by funds provided by these industries and will continue the studies on heavy metal

poisoning which have been going on in the physiological laboratory for some years. It will also extend its work into other fields of industrial and public hygiene under the same conditions as those which have prevailed in the past. That is to say, the problems which will be studied will be such as properly belong in the field of University investigation, and the results will be made public through the usual scientific channels under University control.

Dr. Robert A. Kehoe, assistant professor of physiology, will be in direct charge of the activities carried out in the new laboratory.

Baylor University College of Medicine

On Oct. 11, a bronze bust of Dr. Edward H. Cary, dean emeritus and professor of ophthalmology and oto-laryngology, was presented by the faculty to the college. Dr. Cary was dean for nearly twenty years.

Lincoln Scholarship Fund

A campaign started a few months ago in New York City to create a fund of $1,200,000 to be loaned to ambitious men and women in order to secure a college education.

The announcement was made by J. B. Vandeber, president of the Lincoln Scholarship Fund, Inc., as the organization is to be called, with headquarters, 1 East Forty-second street. The $1,200,000 is to be raised by the sale of thirty-year non-interest-bearing debenture bonds. The sum obtained in this way will be used immediately for the purpose of working capital with two hundred applicants for loans already approved. The money is to be used, "regardless of sex, age, race, color or creed." College professors who are in need of funds are eligible candidates for loans in order to secure money for further studying towards securing higher scholastic degrees than now possessed.

There is no charity aspect in the loans since every participant is expected to repay the money received but without interest and as soon after graduation as possible.

The eventual amount to be secured as a loan fund will be in the total of $10,000,000. All officers of the fund will serve without pay with administrative expenses of a minor nature to be paid by a special donation leaving the fund in toto solely for the original purpose intended.

The national advisory committee consists of Dr. Ray Lyman Wilbur, Secretary of the Interior, Dr. William J. Cooper, United States Commissioner of Education, and twenty-three state governors, fifty-seven college professors, seventy mayors of cities and heads of large corporations. Sir Hubert Wilkins, Jane Addams and Dr. Irving Fisher are also members of the committee.

Bowdoin College Scholarships

Bowdoin College is using a part of the income from the Garcelon-Merritt Fund that was formerly devoted to the medical school, for scholarships for Maine boys studying medicine. Annually about $10,000 is distributed to about thirty candidates. The men are in most of the leading medical schools of the country. This year a fellowship of $1,500 has been awarded to Dr. Henry Sprince, Lewiston, Maine, Bowdoin '24, McGill Medical School '28, to enable him to do special work in Boston.

Meharry Medical College

A Meharry graduate of the class of 1928 received the highest average given by the National Board of Medical Examiners in Part 2 of their examination. Dr. Henry E. Hampton attained the very remarkable general average of 208 out of a possible 225 credit units obtainable.

University of California Medical School

An anonymous donor has pledged $10,000 to be paid in forty semiannual sums of $250 to establish a student loan fund in memory of Dr. Edith S. Brownsill, and the first check accompanied the

pledge. The donor requests that the loans to students should not exceed $250 per person each semester, and that the sum be repaid by the student not later than six months after he completes his internship. Interest at 6 per cent per annum from the date of graduation or withdrawal from the university will be charged.

Western Reserve University Institute of Pathology

The building was formally dedicated, October 7. The dedicatory address was given by Prof. Henry R. Dean, Cambridge University, England. The building was turned over to the medical school by Robert E. Vinson, president of the university, and accepted by the director of the Institute of Pathology, Dr. Howard T. Karsner.

Western Reserve University on this occasion conferred the honorary degree of doctor of laws on Professor Dean and on Drs. William T. Councilman of Harvard University, Ludvig Hektoen of Rush Medical College, and Simon Flexner, formerly of the Rockefeller Foundation. The degree of D.Sc. was conferred on Dr. William H. Welch of Johns Hopkins University, he having received an LL.D. from Western Reserve in 1894.

The institute, which is a five story and two basement structure communicating by tunnel with the nearby hospitals, nurses' home and medical school, is to be a central laboratory for the more intricate routine tests for all of the hospitals, and medical and dental schools of the university. The first floor is for the use of students who, except for necropsies, need to go nowhere else in the building for routine work. The second floor has the library, the office of the director and secretary, and the record and conference rooms. At the right of the doorway are bas-reliefs representing Morgagni, Virchow, Rokitansky and Pasteur, and at the left, John Hunter, Cohnheim, Bichat and Welch. The central figure in the frieze above the door is the American caduceus under which is an open book with this legend from Claude Bernard: "Observation Shows and Experiment Teaches." Panels under the windows are motifs from the shields of medieval guilds. The frieze around the entrance hall shows the uncoiled snakes entwined in the pine trees. The lamp shades in the library are decorated with the trade marks of eight of the medical publishers.

Columbia University Student Health Service

The health officer of Columbia University, Dr. William H. McCastline, and Herbert E. Hawkes, LL. D., dean of Columbia College, have changed the plan of conducting physical examinations of students entering the university by having the examination done by sixteen physicians, instead of having them under the direction of the department of physical education. It is proposed that the health of students will be followed up through their four years of college work; it is also proposed to build and endow a separate building for the university health service.

Herzstein-Lane Lectures

The Herzstein Medical Lectures, for which the late Dr. Morris Herzstein left an endowment of $20,000 to the University of California and Stanford University, were started recently. Dr. Herzstein left the residue of his estate to the University of California, approximately $637,000. In accordance with his wishes, $100,000 of this sum will be used as an endowment for a chair of biology either in the Medical School or on the Berkeley Campus.

The Herzstein and Lane Lectures will alternate by special agreement between the University of California and Stanford University.

Institute for Research in Heart Diseases

Mrs. Louise Kerckhoff, Los Angeles, has turned over to the municipality of Bad Nauheim, Germany, an endowment fund of $1,080,000 to be used to build and maintain an institution for research in heart diseases. The gift is a memorial

to the husband of the donor. Its expenditure will be supervised by a committee consisting of four members of her family, Professor Groedel, who will direct the new institution, and representatives of the universities at Frankfort and Giesen, and of the technical high schools at Darmstadt and Nauheim. Half the gift will be used to endow scholarships. The new institution will comprise a department of experimental pathology and therapeutics, a department for public instruction on heart disease, a department of statistics, and a department for the examination of patients who are subjects of social insurance.

Long Island College Hospital

The following changes in the faculty are announced: Jean R. Oliver, formerly professor of pathology, Stanford University School of Medicine, to be professor of pathology; Clayton J. Sharp, formerly with the Columbia University College of Physicians and Surgeons, to be assistant professor of anatomy; Daniel M. McCarthy and James Pullman to be clinical professors of medicine; Alec N. Thomson to be assistant professor of preventive medicine and hygiene; Hector W. Benoit and William M. Ennis to be assistant clinical professors of surgery; George Kornfield and Arthur E. Soper to be associates in obstetrics and gynecology and neurology, respectively.

National Institute of Psychology

This organization has been incorporated in Washington by Dr. Hugh S. Cumming, surgeon general, U. S. Public Health Service; Knight Dunlap, Ph.D., Johns Hopkins University, Baltimore, and Edwin E. Slosson, Ph.D., of Science Service. The object is to found a national psychologic laboratory, similar in some of its functions to the bureau of standards, but not under federal control, to undertake programs of research too lengthy and complicated for other institutions. The institute desires to locate in Washington because of the exceptional facilities for research and the opportunities to cooperate with universities and other organizations. The active members include about fifty experimental psychologists. The financial plans are incomplete.

Prizes for Case Reports by Interns

The Allegheny County Medical Society, Pittsburgh, again offers prizes of $25 and $15 for the two best case reports submitted by interns in any approved hospital in Allegheny County. The report shall be that of a case which has been under the care of the person reporting. It should comprise 800 words or less, and be mailed to the secretary of the county medical society, Jenkins Arcade, Pittsburgh, prior to April 1, 1930, with no direct means of identification on the manuscript. A separate envelope containing the intern's name, address and the name of his hospital should accompany the report.

Assisting American Graduate Students in England

The Fellowship of Medicine and Post-Graduate Medical Association, 1 Wimpole Street, London, W. I., England, is a central bureau of information, which will assist American physicians in arranging courses for graduate study in hospitals and clinics in London. No charge is made for this service. Opportunities for clinical work in London are provided the year round in forty hospitals associated with the fellowship. There are also special courses on practically all medical subjects, and free demonstrations weekly. The Fellowship of Medicine on inquiry to the secretary will supply the dates, duration and opportunities for these courses as well as the dates of the various examinations for degrees and diplomas.

Melbourne University New Chair of Obstetrics

Robert Marshall Allan has been appointed to the chair of obstetrics at the Melbourne University, the first chair in a clinical subject at Melbourne. The appointment also carries with it the position of state director of obstetrics.

The chair was established by the university with the assistance of the state government and the Edward Wilson Trust. The latter's contribution is £20,000 in government bonds. The chair carries with it the salary of £2,000 a year. Private practice will not be allowed to the professor, but he will be available for consultations at no cost with the medical advisers of patients in the two chief obstetric hospitals of Melbourne. A sum of £1,000 a year is available for the provision of additional staff or research facilities as the professor desires. The tenure of the professorship will be for a period of five years.

Dr. Allan has occupied the position of director of obstetric research in the university during the past four years.

Jefferson Medical College

The new school building has been completed, and was occupied with the opening of school this fall. It is a $1,650,000 twelve story yellow brick structure, adjoining the new sixteen story Jefferson Hospital. The equipment is also largely new. The original plan to renovate the old medical college building for use as an outpatient department has been abandoned. A new clinic, named in honor of Cyrus H. K. Curtis, who gave $500,000, will be constructed; others have contributed a like sum. When the Curtis Clinic is completed adjoining the college building, there will be "one architectural whole," 268 feet long on the north side of Walnut Street, west from Tenth Street, and 110 feet deep. The two portions of Jefferson Hospital adjoining are also 268 by 110 feet. Jefferson has, in addition, several lots on Eleventh Street, a dispensary for maternity patients, a clinic for chest diseases at 238 Pine Street, and anatomic laboratories at Eleventh and Clinton, in all, a group of nine buildings. In the new college building is a library with a capacity of 40,000 volumes, about three times that of the present number of books on hand. A bequest from the late Samuel P. Scott of Hillsboro, Ohio, will bring nearly $1,000,000 for the endowment of this library.

Wilmer Ophthalmologic Institute

Ophthalmologists from European and American centers attended the dedication at Johns Hopkins University School of Medicine, Baltimore, October 15-16, of the Wilmer Ophthalmological Institute. In 1922, the William Holland Wilmer Foundation was incorporated to establish and endow the institution and in 1925 the General Education Board gave $1,500,000 toward a $3,000,000 fund for this purpose. The Wilmer Ophthalmological Institute now serves as the eye clinic of Johns Hopkins Hospital and the department of ophthalmology of Johns Hopkins University. Its work comprises teaching, the care of patients and research. Associated with the institute on a part-time university basis is a large staff of practicing ophthalmologists who are accorded the privilege of having their patients admitted. The building harmonizes with the architecture of Johns Hopkins Hospital, with which it is connected. The administrative offices, main lecture room, photographic and artists' rooms, library and radium laboratory are on the first floor. The second floor has private rooms and cubicles. The third floor wards provide for forty-seven beds and the fourth floor for the clinical and research laboratory, Dr. Wilmer's special laboratory, operating rooms and the main supply room. On the top floor are more laboratories and wards for experimental animals. There are seventy-two beds for patients. The institute has been planned and the policies have been outlined to make it a gradually expanding source for the direction of ophthalmologic thought in America. Dr. Wilmer is the director. Gifts totaling $60,000 to found research fellowships were announced and an endeavor will be made to obtain funds for more fellowships. The gifts were from the secretary of the treasury, Andrew W. Mellon, and his brother, Richard, and from Adolph Lewisohn, New York.

New England Medical Center

When completed this will consist of a city dispensary, a modern free hospital

for babies, classrooms and clinical teaching facilities for training physicians and a scientific laboratory and operating equipment for the use of all three, will be contained in a group of buildings to be erected at the present location of the Boston Dispensary. Plans already made call for the remodeling and enlargement of the dispensary, the erection of a forty-bed land hospital of the Floating Hospital and a third building will be constructed jointly to provide a center of clinical training for the Tufts College Medical School, additional clinics for the dispensary and a dormitory for nurses. While the three institutions will continue to maintain their separate identities, they will, in combining, benefit by the economy and efficiency resulting from a merging of interests. Laboratories, operating rooms, x-ray plant, dining-rooms, kitchen, laundry, power plant and pharmacy will be shared in common. It is estimated that the carrying out of this building project will cost $970,000. To operate the completed medical center will require the addition of at least $520,-000 to the endowment funds of the three institutions, making necessary a total outlay of $1,500,000, in addition to the present resources of the Boston Dispensary, the Floating Hospital and Tufts College Medical School. One of the principal motives behind the consolidation is that of bringing back to a position of greater importance the family practitioner and the ideals which he represents.

Study of Tuberculosis

The British Medical Research Council announces that they have received from Mrs. Odo Cross a sum of £40,000 as the endowment of a trust for the establishment of research fellowships for the study of tuberculosis, to be known as the "Dorothy Temple Cross Research Fellowship Fund."

Boston University

A gift of $100,000 to the building fund has been made by Dr. William E. Chenery and Mrs. Chenery. Dr. Chenery is a nose and throat specialist of Boston and a lecturer at the medical school of the university, of which he is also a trustee.

University of Buffalo

On October 17, a campaign was opened for five million dollars, to be added to the endowment fund. The campaign closed on October 29, at which time there had already been pledged a total of $5,331,670. Among the gifts were $1,-000,000 from the Schoellkopf family, $500,000 from Mr. and Mrs. J. F. Schoellkopf, $500,000 from Thomas B. Lockwood for a new library building, $200,-000 from William H. Crosby and his family which with previous gifts will be used to erect a building for the school of business administration, and $125,000 from Mrs. Joseph T. Jones for the establishment of a chair of French. With the exceptions noted, practically all the remaining contributions are to be used as the university trustees see fit.

University of Tennessee

The university will operate its medical department and the pharmacy and dental schools the year around beginning with the 1930-1931 school year. This will make it possible to finish the course in three instead of four years.

Anent Medical History

One of the most notable figures in the realm of science and letters, Dr. Karl Sudhoff, director of the famous Institute of Medical History at Leipsig, Germany, recently was a visitor in this country.

Dr. Sudhoff, alert and mentally vigorout at the age of 76, with an active interest in many other sciences besides medicine, came to this country to deliver an address on the occasion of the dedication of the building of the William H. Welch Library of Johns Hopkins University.

Dr. Sudhoff is regarded as the greatest living medical historian. After many years of teaching historical medicine at the University of Leipsig, he was made emeritus professor.

His talents are by no means confined to medicine. He is an authority in Hebrew, Greek, Sanskrit and the Egyptian hieroglyphics found in crumbling papyri. He has devoted many years of his life to such researches.

Under his direction the Institute of Medical History at Leipsig made a specialty of finding and printing rare manuscripts in many languages, after a long research in the monasteries and city archives all over Europe, Great Britain, Asia and Africa.

A man of varied tastes and talents, Dr. Sudhoff is an accomplished musician and student of music. He is almost as well known in the science of botany as he is in the field of medicine. In odd moments, he has written on the philosophy of Goethe and such subjects as the "Rhymes of Sophocles."

American Association of Obstetricians, Gynecologists and Abdominal Surgeons Foundation

The foundation has been organized to gather, promote and disseminate theoretical and practical knowledge on these and allied subjects. One must be a member of the parent organization to be eligible to membership in the latter. The immediate activities will be the urging of better teaching of obstetrics; an appeal will be made to all medical schools to equalize the hours of teaching with those given to surgery. The foundation will urge the making of prenatal care universal, and will conduct propaganda among women's clubs, health centers, parent-teacher associations for a better understanding of maternal welfare. The foundation was incorporated under the laws of Michigan. The president for this year is Dr. George Van Amber Brown, Detroit; Dr. Alexander M. Campbell, Grand Rapids, is vice-president, and Dr. James E. Davis, Ann Arbor, secretary.

Kentucky Student Loan Fund

The Kentucky State Medical Association has appointed a committee to solicit funds for a student loan fund to be made available for any Kentuckian who desires to study medicine and needs financial aid.

University of Illinois College of Medicine

The $1,500,000 which, as announced in the April (1929) issue of the JOURNAL, was to be asked for the erection of the new medical and dental laboratories, has been granted by the state legislature and the plans are now being prepared. It is expected that ground will be broken soon after Jan. 1, 1930. These buildings are to take care of teaching primarily in the fundamentals of both medicine and dentistry. They will be located at the southeast corner of Lincoln and Polk Streets in juxtaposition with the Research and Educational Hospital and Research and Library Building.

The number of students admitted to the first year class at the beginning of the present semester was increased from 130 to 175. This has been made possible by the expansion contemplated in connection with the new medical and dental laboratories, mentioned above.

Under the auspices of the Medico-Historical Lectures the following lectures have recently been given: October 16, Dr. D. P. D. Wilkie, professor of surgery in the University of Edinburgh, on "Medicine in Scotland," with special reference to its relations to American medicine; October 30, Dr. Ernest Fuchs, Hofrat professor of ophthalmology in the University of Vienna, on "Trachoma"; October 29, Dr. Ernst Friedrich Muller, professor of medicine, University of Hamburg, on "Clinical Symptomatology and Autonomic Nervous System"; October 30, "An Interpretation of the Acute Exanthemata on the Basis of Autonomic Alterations," and October 31, before the Society of Sigma Xi, on "The Skin as a Vegetative Sense Organ"; November 6, Dr. H. A. McGuigan, professor of pharmacology on "A Sabbatical Year in Europe."

Faculty appointments: W. M. Harsha, professor of surgery, emeritus; J. M. Patton, professor of clinical medicine,

emeritus; O. F. Kampmeier, professor and head of the department of anatomy; Lloyd Arnold, professor of bacteriology and preventive medicine; F. P. Reagan, associate professor, and A. A. Zimmermann, assistant professor of anatomy; M. S. Wien, assistant professor of dermatology; J. Meyer, associate professor; S. Perlstein, J. B. Cipriani, A. VanderKloot, E. B. Freilich, E. Foley and H. P. Gunnar, assistant professors; M. Streicher, I. A. Rabens and C. L. Birch, Associates, and W. C. Doepp, L. Feldman, J. Fischer, W. W. Dalitsch, L. B. Kartoon and A. J. Weinberg, instructors in medicine; D. M. Olkon, assistant professor of neurology; J. K. Calvin, P. Rosenblum and M. P. Borovsky, assistant professors, L. S. Robins, H. G. Poncher and G. F. Weinfeld, associates, and B. M. Gasul, instructor in pediatrics; A. F. Lash, assistant professor of obstetrics and gynecology, and M. Bloomfield, instructor in obstetrics; Hallard Beard, associate professor, S. C. Greenwald, associate, and S. I. Kaufman, H. Cohen and S. Wolf, instructors in ophthalmology; I. Pilot, associate professor of pathology and of medicine, and R. J. Kremer, instructor in pathology and bacteriology; G. W. Post, assistant professor, V. R. Stevens and H. C. Wallace, associates, and E. E. Ewert and P. J. DeLano, instructors in surgery; J. J. Theobald, associate in laryngology, rhinology and otology; H. M. Ross and T. F. Mullen, instructors in orthopedic surgery; A. L. Aaronson, instructor in physiological chemistry.

Temple University School of Medicine

Construction has started on a $1,500,000 building at Broad and Ontario Streets. Simultaneously, the president of the university, Charles E. Beury, announced the creation of six new departments in the school of medicine: medical research, neuro-surgery, physical therapy, neurology, bronchoscopy and otology. The new building, which will replace the present inadequate quarters, will conform in design to that of the Samaritan Hospital across the street. The first two floors will be for the outpatient department of the hospital and the upper five and the basement for the medical school. The exterior will be of red brick and limestone. The third floor will contain the department of pharmacology and an auditorium which may be divided into two large lecture rooms. About one-third of the floor will be left for future expansion. The departments of chemistry and physiology will occupy the fourth floor, each having a laboratory large enough for 100 students and lecture rooms to accommodate that number, as well as research laboratories. The department of pathology and bacteriology will occupy the fifth floor with two large laboratories, a number of smaller ones, staff offices and special rooms and a pathologic museum. The sixth floor will be given entirely to the department of anatomy, and research laboratories and offices. The animal storage, and medical and surgical research departments will be on the seventh floor; in the basement will be lounging rooms, locker rooms and library book stacks. The building is expected to be ready for occupancy by September, 1930.

Yale University School of Medicine

Dr. Eugen Kahn of Munich, Germany, has been appointed professor of psychiatry and mental hygiene. The Rockefeller Foundation has pledged $100,000 a year for ten years toward a program to develop the study of psychiatry and mental hygiene at Yale. Dr. Kahn's appointment is among the first in connection with this program. The foundation also is providing funds for the Institute of Human Relations building. The Commonwealth Fund is making an annual allowance of $50,000 for the development of a mental hygiene program. The institute building will have facilities for the care of fifty persons, some of whom will be of inferior mentality, and others of average and superior mentality. The keynote of this work is to be the prevention of mental disease by tracing it to the contributing factors and origins.

Personals

Joseph Barcroft, professor of physiology in the University of Cambridge, England, delivered four lectures under the Edward K. Dunham Lectureship for the promotion of the medical sciences at the Harvard Medical School.

Harry B. Levey, Chicago, has been appointed director of the child guidance clinic of the Tulane University School of Medicine.

Everett L. Sanderson has resumed his duties as head of the department of bacteriology and pathology in the University of Mississippi School of Medicine, having completed his research work on respiratory diseases in the Virgin Islands as a special member of the Rockefeller Foundation.

Alexander G. Ruthven, dean of administration and professor of zoology in the University of Michigan, has been elected president to succeed Clarence C. Little.

James T. Case of Battle Creek, Mich., has been placed in charge of the roentgen ray department of the New Passavant Memorial Hospital, Chicago, a teaching hospital of Northwestern University Medical School.

Byron B. Davis has been appointed chairman of the department of surgery in the College of Medicine of the University of Nebraska to succeed August F. Jones who has been made emeritus professor of surgery.

John C. Hemmeter, University of Maryland School of Medicine, has been elected an honorary member of the Academy of Medicine of Paris.

Esmond R. Long, professor of pathology in the University of Chicago, has been appointed editor-in-chief of the *Journal of Outdoor Life*.

Henry McE. Knower, formerly professor of anatomy in the University of Alabama, will spend the coming year at the Wistar Institute of Anatomy.

The Reverend John L. Zipprich has succeeded the Reverend Walter G. Summers as regent of the school of medicine of Georgetown University.

William M. Parkinson has been appointed dean of the Temple University School of Medicine, succeeding Frank C. Hammond, who resigned.

Fred L. Adair, professor of gynecology and obstetrics in the University of Minnesota Medical School, has accepted the chair of gynecology and obstetrics in the University of Chicago.

Charles J. Rowan, formerly head of the department of surgery in the School of Medicine of the University of Iowa, who resigned in 1927, has rejoined the faculty as professor of clinical surgery.

Walter R. Berryhill, Belmont, N. C., has joined the faculty of the School of Medicine of the University of North Carolina.

Chevalier Jackson has resigned from the faculty of Jefferson Medical College and joined the faculty of the Temple University School of Medicine.

Alan R. Anderson has accepted the deanship of the New York Post Graduate Medical School.

Frank C. Hammond resigned from the deanship of the School of Medicine of Temple University.

The honorary degree of doctor of science was conferred on James H. Brown, professor of bacteriology in Johns Hopkins University and Joseph A. Capps,

professor of clinical medicine in the University of Chicago, by Illinois College at its centennial celebration.

Robert B. Greenough, assistant professor of surgery in the Harvard Medical School, was elected chairman of the Board of Directors of the American Society for the Control of Cancer.

J. Allen Scott, of the School of Hygiene and Public Health of the Johns Hopkins University, has accepted an appointment in the Public Health Laboratories, Cairo, Egypt.

Harry Gideon Wells, professor and chairman of the department of pathology of the University of Chicago, delivered the tenth Pasteur lecture before the Chicago Institute of Medicine.

Dr. Meyer Solomon, associate in neurology, Northwestern University Medical School, has been appointed acting director of the psychopathic laboratory of the Municipal Court of Chicago.

Robert A. Strong has been appointed professor and head of the department of pediatrics in Tulane University School of Medicine to succeed Laurence R. DeBuys who will devote his entire time to private practice.

William W. Keen, emeritus professor of surgery in Jefferson Medical College, was recently elected the first honorary member of the International Congress of Surgery.

Ray Lyman Wilbur delivered the principal address at the dedication of the new medical school building of the University of Virginia.

Temple Fay has resigned from the faculty of the School of Medicine of the University of Pennsylvania to accept the headship of the newly established department of neurosurgery in Temple University.

Henry S. K. Willis, lecturer in clinical medicine at the Johns Hopkins University School of Medicine, has been placed in charge of the Dows Tuberculosis Research Laboratory to succeed Dr. Allen K. Krause, who resigned from the directorship of the laboratory to accept a position at the Desert Sanatorium, Tucson, Ariz.

Harvey Cushing, Moseley professor of surgery at Harvard University Medical School, was the principal speaker at the dedication of the Welch Medical Library of Johns Hopkins University, October 17.

J. W. Bigger, professor of bacteriology and preventive medicine, Trinity College, Dublin, spent October and November in the United States and Canada visiting medical schools and hospitals under the auspices of the Rockefeller Foundation.

Henry H. Plowden, for several years assistant professor of pathology, Medical College of the State of South Carolina, Charleston, has been appointed director of the pathologic laboratory of the Columbia Hospital, Columbia.

Judson Daland, professor of medicine, Graduate School of Medicine of the University of Pennsylvania, has returned from a six months' tour of Rhodesia, Uganda and Tanganyika.

Reverend Francis A. Tordorf, S. J., has succeeded the Reverend Walter G. Summers as professor of physiology in the School of Medicine of Georgetown University. Father Tordorf is the well known authority on seismology.

Professor Karl Sudhoff, director emeritus of the institute of the history of medicine of the University of Leipzig, gave an illustrated lecture on "Cos and Cnidos," on October 22, at the Rockefeller Institute for Medical Research, New York, under the auspices of the institute, the History of Science Society, the section of historical and cultural medicine of the New York Academy of Medicine and The Charaka Club.

H. W. Davies, lecturer in physiology in the University of Leeds, has been ap-

pointed to the chair of physiology in the University of Sydney.

Columbia University conferred the degree of doctor of science on Hans Zinsser, professor of bacteriology and immunology in Harvard University, and Frederick Tilney, professor of neurology and neuroanatomy, in Columbia University.

W. E. Garrey, professor of physiology at the Vanderbilt University School of Medicine, recently was elected to serve as member at large on the medical division of the National Research Council. Dr. Garrey is also a member of the executive committee of the biological division of the council.

A portrait of the late Arthur Loevenhart, former head of the department of pharmacology of the medical school of the University of Wisconsin, has been hung in the auditorium of the Memorial Institute of the Wisconsin General Hospital. The donors are colleagues, friends and students.

A bas-relief in memory of Dr. John Howland was unveiled in the amphitheater of the Harriet Lane Home for Invalid Children of Johns Hopkins Hospital. Dr. Howland was director of the home for fourteen years and head of the department of pediatrics at the Johns Hopkins University School of Medicine. The bas-relief of stained marble has a likeness of Dr. Howland in the center, and that of a child on each side.

J. Hubert von Pourtales, clinical pathologist at the New York Foundling Hospital, has been appointed to the newly created office of assistant director of laboratories at the New York Neurological Hospital, Medical Center, New York City.

E. K. Marshall, professor of physiology in the Johns Hopkins Medical School, delivered the second Harvey Society Lecture at the New York Academy of Medicine, November 2. His subject was "The Minute Output of the Heart in Health and Disease."

G. Canby Robinson, director of the New York Hospital-Cornell Medical College Association, has been elected president of the Harvey Society.

Albert Warren Stearns, dean of Tufts College Medical School and professor of nervous and mental diseases, has been appointed commissioner of correction for the commonwealth of Massachusetts.

Dr. John A. Kolmer, professor of pathology and bacteriology in the graduate school of medicine of the University of Pennsylvania, was recently awarded the Mendel Medal by Villa Nova College for his work in immunology. This is the first award of the medal, which was established to commemorate the work of Gregor Mendel.

Dr. George S. Amsden has been appointed professor of psychiatry and director of the Max G. Schlapp Memorial Mental Hygiene Clinic, in the New York Post Graduate Medical School.

Dr. C. Floyd Haviland has been appointed consultant in psychiatry.

Raymond Asa Kent was recently inaugurated president of the University of Louisville.

Clarence J. Campbell, formerly associate professor of physiology at Syracuse University, has been appointed associate professor of pharmacology in the Dartmouth Medical School.

Israel S. Kleiner, professor of physiological chemistry at The New York Homeopathic Medical College and Flower Hospital, has received a grant from the Lucius N. Littauer Foundation to aid him in his studies on the blood sugar in diabetes.

Thomas J. LeBlanc, professor of preventive medicine, returned for the opening of the school year from Peking, China, where he has been teaching for

the past year at the Peking Medical College. He was granted a leave of absence at the request of the Rockefeller Foundation for this service. Dr. LeBlanc was formerly one of the Rockefeller group and has had wide experience in teaching and doing research work in foreign countries.

Ina M. Richter has been promoted to assistant clinical professor of medicine in the University of California Medical School.

Frederick Eberson, assistant professor of medicine in the University of California Medical School, has been appointed director of the clinical laboratory at Mount Zion Hospital.

Arthur H. Curtis has been appointed head of the combined departments of obstetrics and gynecology in Northwestern University Medical School.

Robert B. Greenough, assistant professor of surgery in Harvard Medical School, recently delivered the Mutter Lecture before the College of Physicians of Philadelphia.

Italo F. Volini, professor and head of the department of medicine of Loyola University School of Medicine, was awarded the rank of chevalier of the Crown of Italy for "service to the Italian people in the United States and for fostering Italian ideals and culture."

Charles A. Elliott, professor of medicine, Northwestern University Medical School, has been appointed a member of the medical council of the U. S. Veterans' Bureau to succeed the late Dr. Frank B. Granger of Boston.

Clarence J. McMullen has resigned as assistant clinical professor of medicine at Rush Medical College.

George E. Vincent will retire from the presidency of the Rockefeller Foundation January 1, having reached the age limit. Max Mason will succeed him.

William F. Moncreiff has been appointed associate clinical professor in the department of ophthalmology at Rush Medical College.

Dean Lewis, professor of surgery in Johns Hopkins University, gave the first Albert Berney lecture in Mt. Sinai Hospital, New York.

George H. Cross, Chester, Pa., has been appointed assistant professor of ophthalmology in the University of Pennsylvania Graduate School of Medicine.

Carl H. Davis, Milwaukee, is presenting a special course at Rush Medical College this fall in an experiment to adapt moving pictures and lantern slides to the teaching of gynecology and obstetrics.

Harvey Cushing, Moseley professor of surgery in Harvard Medical School, received an honorary doctorate from the University of Strasbourg.

The alumni of the University of Michigan Medical School presented the university with a portrait of D. F. G. Novy, professor of bacteriology and for forty-three years a member of the faculty.

John C. Bloodgood, clinical professor of surgery in Johns Hopkins University School of Medicine, and Russell L. Haden, professor of experimental medicine in the School of Medicine of the University of Kansas, were each awarded a gold medal for special research work by the Radiological Society of North America.

Timothy Leary has resigned from the professorship of pathology and bacteriology in Tufts College Medical School.

Sidney W. Bliss has accepted the professorship of biochemistry in the Tulane University Medical Department, succeeding the late Willey Denis.

Deaths

Lafayette Page, professor of otology, rhinology and laryngology in the Indiana University School of Medicine, died in July of heart disease.

Charles Stanley McVicar, assistant professor of medicine, University of Minnesota Graduate School of Medicine, died in June of coronary sclerosis.

James D. Voorhees, professor of obstetric surgery in Columbia University College of Physicians and Surgeons, died recently, aged 60.

A. Mackenzie Forbes, clinical professor of orthopedic surgery in McGill University Faculty of Medicine, died recently.

Henry McCabe, associate clinical professor of obstetrics and gynecology in Marquette University School of Medicine, died in June of carcinoma of the colon.

Morton Prince, emeritus professor of diseases of the nervous system in Tufts College Medical School, died in August, aged 74.

William T. Belfield, emeritus professor of genito-urinary surgery in Rush Medical College, died, aged 73.

Joseph W. Holland, clinical professor of surgery in the University of Maryland and School of Medicine, died, aged 59.

William J. Robinson, associate professor of psychiatry in the University of Western Ontario Faculty of Medicine, died, aged 71.

Seth MacCuen Smith, professor of otology in Jefferson Medical College, died, aged 66.

Harry Taylor Marshall, Walter Reed professor of pathology and bacteriology in the Medical School of the University of Virginia since 1908, died of pneumonia following an operation in the American Hospital in Paris on November 8.

Henry H. Hoppe, professor of neurology in the School of Medicine of the University of Cincinnati, died, aged 62.

Victor C. Vaughan, for many years dean of the University of Michigan Medical School, died suddenly in Richmond, Va., November 21.

Reverend Francis A. Tondorff, S. J., well known authority on earthquakes, and professor of physiology in Georgetown University School of Medicine, died recently of heart disease, aged 59.

Harry M. McClanahan, emeritus professor of pediatrics in University of Nebraska College of Medicine, died of heart disease, aged 72.

Abstracts of Current Literature

Relieving the Curriculum

Reaction to the over-crowding of the medical curriculum came largely with acceptance of basic ideas in professional education. First of these is the creation of the questioning habit of mind, the spirit of scientific curiosity; then, secondly, the realization of the function of a teacher as a piloting agent who offers the opportunity for the student to learn; and lastly, avoidance of too much teaching in too many subjects, but with this teaching at the highest possible level. Development of a medical school with these underlying ideas requires, most of all, an excellent faculty of an investigative bent, and then good laboratories, abundance of material, good clinics with many patients. With such a faculty and with such facilities, the course of required instruction may be so arranged that the student has freedom of time for thoughtful analysis and synthesis of the body of fact which comes before him—liberty for pursuit of this own personal inquiries.

The experiment was set up in the school with which I am connected; a new curriculum, expressing these conceptions of professional education was devised. It was found desirable to reduce the number of required hours to a minimum, in order to give the student sufficient free time; and this minimum was fairly accurately gauged as constituting one-half of the total time in the four year curriculum, so that the obligatory courses aggregated slightly over 2500 hours.

To reduce the required work in the four year curriculum to this level, it is necessary that the departmental teaching be limited to basic courses in which the essential elements of the subject are alone presented. Superimposed upon this basic instruction should be ample opportunities for additional courses in the required subjects, for elective courses in all branches, and for other work of the student's own choosing. The minor medical specialties have no required hours except as assigned to them in the major courses of clinical instruction. But every student would have the diagnostic procedures, characteristic of the specialties, presented to him in a course given at the same time as the elementary instruction in physical diagnosis. The students would be enabled to gain additional knowledge of these subjects by electing to spend the free time in courses devoted to the special fields.

Student comment regarding this curriculum may be divided into three main lines of thought: One group of students, representing in general the best type, is thoroughly happy at the great amount of free time afforded for special work of one's own choice. It is this type of student who becomes essentially interested in some one subject during his student days and who later develops into an outstanding clinician or into the university type of medical teacher. The second group of students feels that the curriculum operates quite well but would like to have more opportunity for additional elective work in all subjects, particularly in the way of practical work in the clinical branches. This group comprises the larger part of the class and is composed of the good students, on whom in the final analysis the reputation of the school must rest. The third group of students is not so large; it is in general composed of the poorer members of the student-body. This group wishes to have every minute of the day taken up with practical courses; it is the group which ordinarily thrives on thoroughly didactic teaching.—Lewis H. Weed, *Johns Hopkins Hospital Bull.*, 24: 206 (Oct.) 1929.

What Constitutes a Desirable Medical Student?

The well prepared mind is even more essential to the clinical teacher than to

the anatomist or pathologist, for in the last two years the student, if he is to have any degree of proficiency, must be able quickly and surely to take hold of a great variety of findings and transform them into single disease entities. His mistakes will here often be costly because they will directly affect human life and human happiness. The work at the bedside will require an accurate, critical knowledge of fundamentals. In addition to a well-prepared mind, another indispensable attribute of a desirable medical student is intellectual curiosity.

A student with this rare quality of intellectual curiosity is likely to succeed if he has will power to back it up, for his very approach to medicine will be largely his own. His constant desire to know the truth will lead him along fascinating paths through every step of which he has blazed trails for himself too deep to be erased and always ready to be retraveled with confidence. In the end his knowledge will be far more real and enduring than that of one who has followed the humdrum routine of acquiring knowledge. Even if he misses his exact goal at times, his "search will be crowned with courage" and he will "find along the path a rich reward of unexpected things."

Every student should be urged to acquire certain habits even before he enters medical school. One is that of the intelligent use of works of reference. A medical student, to develop into a really successful man, must know how to use a library and must use it, constantly. If we see to it that every student learns to read intelligently and with an end in view, many of our teaching problems will disappear. Among them will be the problem of the use of the large amount of free time in our curricula, a difficulty needlessly troublesome to many schools.

Enthusiasm is not just another of the attributes of a desirable medical student. We need more students in our schools today who are interested enough in their work to be on hand at any cost when things are happening; men who follow medicine as an advancing, disease-conquering art and science; men who are interested in patients as human beings, in experience as a means to knowledge, and in study as an interpreter of experience.

In chosing men for medical school we must realize that grades help in determining a man's industry, but are not necessarily the final index of his success in medical school or in after life. The measure of success achieved at any period of life is dependent largely upon a man's constitutional makeup and the single-mindedness of purpose which he shows during that period. A seemingly very bright man may be merely a bookworm, a memorizer, without any common sense or ability to apply his knowledge; or that another may have a serious personality disturbance, distracting habits, or too many financial burdens to become a desirable medical student. Definite improvement may be made in the selection of men with the right qualities by the appointment of more clinical teachers of the right sort to admission committees.

The candidate for admission may be much more effectively passed upon if a personal interview is required wherever practicable. If this is not possible, good confidential letters from both high school and premedical instructors or interviews between the latter and the committee are safe substitutes, provided the particular instructor is known and may be depended upon to give an unbiased and accurate opinion.

Lastly, it will be advantageous to have a comprehensive examination at the end of the second year to determine a man's fitness to pass into the clinical years. This should be held under the supervision of the clinical department. Its chief purpose should be to determine a man's fitness to go on by testing his ability to coordinate and apply his knowledge. If he were found to be more suited to research or teaching in one of the medical sciences he could tactfully be directed to pursue his work further toward a Ph. D. degree.—KENNETH M. LYNCH, *Southern M. J.*, 22:906 (Oct.) 1929.

The Desirable Medical Student

An analytical frame of mind built up to considerable maturity is essential to entry in the study of medicine, essential to a proper grasp of the medical curriculum, and to the kind of practice of medicine which we desire.

A certain degree of maturity of thought is of considerable importance, and it appears that we are now in some danger of making a sacrifice here in the modern hurry to get students of medicine through the curriculum, through their training, and out into productive activity. I am not convinced of the necessity or advisability of getting boys into the practice of medicine. In fact, I doubt that it is an advantage to anyone to place new practitioners in the field under thirty years of age, even though it may be an economic necessity. I doubt that any but the very exceptional individual is capable of assuming the responsibility of the care of the sick under that age. I am not particularly concerned about the time now used in preparing a physician to practice. Rather, I would make it most difficult for any one to assume practice in the twenties. I believe that the practice of medicine is a mature man's business and that mastering the medical curriculum requires a certain degree of maturity and that these stages of maturity of the mind come ordinarily at certain ages.

I agree thoroughly with the growing practice of personal selection of matriculants, but when we have selected a good man why not give him the full opportunity to mature? A good man will be a good man, regardless of his schooling preparatory to medicine, or, as a matter of fact, regardless of the excellence of his medical curriculum. We have too many concrete examples of that fact among our present faculties and leaders of medicine. But would he not be a great deal better man with a well rounded and completed university education? Instead, some of us are thinking it would be better to handpick our students and then rush them through an arbitrarily set array of minimal training tasks, with the object of placing them in position to make a living in the shortest possible period of time. Is that professional education or is it more the order of training for a trade, training to do a certain set of pieces of work by rule? Is that conducive to creative and imaginative endeavor or does it tend to limit one to following certain prescribed practices? Does it tend to stimulate the principle of service, without which medicine is stripped of its power for good, or does it encourage the habit of self interest? Is it not in line with the tendency, already criticized, of medicine toward commercialism?

I find no urgent reason for haste in medicine. Rather, I would slow us up and give the opportunity for plumbing greater depths. Medical progress has spread laterally out of proportion to its height and depth.

As the desirable qualities in a medical student I would put first a certain high-mindedness, perhaps fundamentally inherited, nurtured by careful schooling. I would add to that an analytical mindedness, also inherited and similarly nurtured. Selection of students for these qualities must be, in some part, at least, by personal touch and judgment. To the individual possessing such qualifications I would give a well rounded preliminary education of a duration sufficient to allow considerable development into maturity of thought, without great concern about the time occupied. I would not throw him into contact with the practice of medicine too early. I would give him sufficient time to mature in the medical atmosphere, but not secluded from the world by occupying him week in and week out, day in and day out, with medicine. I would allow him plenty of time off for contact with the outside. Is not that what vacation time is for during the medical course? It is not for loafing and light play. It should be utilized for joining up the medical life with other walks, which the physician should know something about, and it should be given adequate time. When he is well developed in the medical atmosphere, matured in some high measure of thought, then there is plenty of time for his ap-

prenticeship to a qualified practitioner. When all of this is done we shall have given to the public one who can assume the responsibility of entering its service in preserving and protecting health. We shall have produced a desirable prospect, we shall have led a mind into maturity and not simply a machine into economic productivity. — KENNETH M. LYNCH, *Southern M. J.* 22:904 (Oct.) 1929.

Teaching Medical Students Importance of Environment

When Dalhousie University first gave thought to its Public Health Clinic, it was with the intention that it should provide for clinical instruction in minor illnesses and relieve the hospitals grouped about the medical campus of the need of maintaining outpatient departments. But it was suggested that the clinic might advantageously be used for other purposes and that, by centering therein the several non-official organizations which concern themselves with the public health of Halifax, medical students would be benefited in a number of ways. Thus, a number of organizations were brought under one roof and thereby enabled to confer on and deal with mutual problems conveniently and expeditiously.

The obvious profit which comes to the University from this arrangement is the assistance obtained from nurses and other personnel of the different organizations, several of the clinics, for example, being staffed by nurses of one or other organization. In the clinics and elsewhere this personnel comes into contact with medical students. The information which this personnel can give relative to the conditions under which many clinic patients live appeals to the thoughtful student, who mulls over the possible bearing on the illnesses manifested. If he be gifted with curiosity he wishes to know how such information is obtained and what can be done to remedy unfavorable conditions. He learns about these things by simply talking with the workers. Thus his introduction to the different kinds of medico-social work is self-accomplished, and his interest in such work is free from bias except as the personality of different workers is impressed on him.

Sooner or later in the period during which he attends at the clinic for clinical instruction, the student is directed by a clinician to make a personal investigation of the social and other non-clinical factors associated with a particular case, and to include in the report his opinion as to the bearing of these factors on the causation, prognosis and treatment. Students make this investigation under the supervision of a specially qualified directress experienced in general and public health nursing as well as in social medicine.

In carrying the clinical investigation of a case beyond the person of the patient and into the environment, the student gets information which has more than clinical application. He will note, for example, that in a house which is full of healthy and hilarious kiddies it is usual to find cleanliness, at least fair ventilation, intelligent selection and intelligent preparation of food-stuffs, in short a reasonable although perhaps a purely intuitional observance of the commonly advised health rules, and an atmosphere of cheer. He will note the contrast very often to be seen in a home in which the kiddies are sickly and surly. And thus many of the principles of prevention—which he has already heard—are impressed on him. He learns, too, that the most exact knowledge of the physiologic action of drugs may avail little if he lacks ability to remedy environmental ills. He may even surmise the possibility that financial worries play a part in the causation of illness, and that in such a case the prescription of expensive drugs, diets, or other desiderata may so intensify the action of this casual factor as to nullify the benefits which would otherwise follow treatment. He will find that some environmental faults are comparatively easy of correction while others are all but insuperable. Observation of the methods of the experienced and tactful public health nurse or other social worker may provide the embryo Aesculapian with inval-

uable suggestions for the correction or amelioration of conditions which are likely to confront him in his practice.

Environment other than that of the home may be of importance equal to that of the home. The child of school age can usually be investigated, in respect of school conditions, with the aid of the school nurse. The wage earner presents a different problem, and in order that the Dalhousie medical student may obtain an insight into the influence of conditions of employment on health, he is to be hereafter detailed to investigate such conditions under the tutorship of a public health nurse who has had special training in the preventive aspects of industrial medicine. All instruction in preventive medicine is not given in this way. Lectures in hygiene and public health, and laboratory work in diagnosis, are supplemented by clinics which are mainly or entirely preventive. And, of course, attention is given to prophylaxis by all who lecture in the clinical subjects. But for tuition in most of the newer phases of public health work, dependence is placed on the procedure indicated.—W. H. HATTIE, *Canadian Public Health Journal*, 20:541 (Nov.) 1929.

Book Reviews

Modern Methods of Treatment

By Logan Clendening, M. D., and others. 3rd Ed. C. V. Mosby Company, St. Louis, 1929. $10.

This work is of special value to students because it gives an account of diet as well as drugs, hydrotherapy, blood transfusion, biologic therapy, endocrine therapy, gymnastics and massage, electrotherapeutics, radiotherapy, psychotherapy, etc. Each method of procedure is described so clearly that any one may practice it on the basis of the description. In the second part are given the indications for application based on the principles of physiologic pathology. The references at the end of each chapter are especially valuable for collateral reading, an aid which will be appreciated by senior medical students acting as clinical clerks.

Aids to Dermatology and Venereal Disease

By Robert M. B. Mackenna, 1929. William Wood and Company, New York. Price, $1.50.

A valuable book for the student for quick reference. It is concise; the black side heads are excellent guides; convenient size and inexpensive. This will prove an excellent addition to every medical students' working library.

Harper's Medical Monographs

Harper & Brothers, New York. 1929. Price, each, $2.50.

Angina Pectoris

By Harlow Brooks, M. D.

Diseases of the Blood

By Paul W. Clough, M. D.

Treatment of Diabetes Mellitus with Higher Carbohydrate Diets

By William David Sansum, M. D.

Syphilis

By Charles C. Dennie, M. D.

A series of up-to-date, concise, authoritative volumes of convenient format, and moderate price, giving only essentials on subjects of the utmost importance. Every phase is covered clearly yet concisely on the basis of a long and extensive experience. Not a word is wasted. Nonessentials are omitted. Diagnostic and therapeutic procedures are discussed in detail. These books are most readable and informative, to the point, of convenient size, and inexpensive.

Cerebrospinal Fluid in Health and in Disease

By Abraham Lennison, M. D. 3rd Ed. 1929. C. V. Mosby Company, St. Louis. Price, $8.

A discussion of the cerebrospinal fluid in its various phrases, in its normal state and its deviations in disease—based on careful clinical study and experiments. Methods of examination are described in detail, and judging by their number, none have been omitted. Examination of this fluid is an aid to diagnosis in many diseases both of children and adults. This book brings out to an astounding degree the importance of this fluid in clinical medicine. By being comprehensive it supplies a definite want.

Treatment of the Common Disorders of Digestion

By John L. Kantor, Ph. D., M. D. 1929. 2nd Ed. C. V. Mosby Company, St. Louis. Price, $6.

A discussion of general principles and methods of management of functional digestive disorders, asthenic states, gastric and duodenal ulcer, achylia gastrica, constipation, diarrhea, and other gastrointestinal diseases, with complete diet lists based on those in use in the Vanderbilt Clinic and representing the outgrowth of years of cumulative experience by many clinicians. Vitamines, liver diet in pernicious anemia and sprue, and hydrochloric acid therapy are discussed fully. Many palatable liver diets will prove useful and welcome to those who must perforce partake of them. This is a welcome addition to every workaday library. The appended references permit of wider reading.

Synopsis of Midwifery and Gynecology

By Aleck W. Bourne, B. A., M. B., B. Ch. (comb.), F. R. C. S. (Eng.). 4th Ed. 1929. William Wood and Company, N[ew] York. Price, $4.50.

This is a synoptic presentation wh[ich] should prove of great value to stude[nts] as a substitute for a large textb[ook]. Operative details are omitted—evide[ntly] being left for later graduate study [in] preparation for specialization. The ma[j]or portion of the book is devoted [to] obstetrics, the arrangement of chapt[ers] being the usual one. A special chap[ter] is devoted to obstetric surgery.

The convenient size of this book, [its] wide scope and yet concisiveness mak[e it] an ideal book for the student on ma[ter]nity service or in preparation for exa[m]ination.

Essentials of Medical Diagnosis

By Sir Thomas Horder, M. D., [and] A. E. Gow, M. D., F. R. C. P. (Lond.) 1929. William Wood and Company, N[ew] York. Price, $5.00.

At last the medical student is giv[en] a conveniently sized book which [will] prove of great value to him in his cl[in]ical clerkship. First of all he is t[old] briefly but fully how to write a medi[cal] history and how to make those exa[m]inations which are needed to make [a] good history. Next, data are assembl[ed] in a practical way for making a diag[-]nosis. The student is shown how to [col]lect clinical data effectively. The t[ext] is divided into eleven sections, ten b[ook]s devoted to one of the major systems [of] one to a discussion of pyrexia. By p[re]senting the signs and symptoms in [a] logical way, the student passes from [a] consideration of the patient's complai[nts] to the disease from which he suffers. There is a brief anatomical and phys[i]ological introduction to each section, which is the best stepping stone to [a] diagnosis. The site of the lesion is d[e]termined first then its probable nature. The book can be recommended to every student as an extremely valuable addition to his working library.